

GLOBAL CONSTRUCTION DISPUTES REPORT

2016

DON'T GET LEFT BEHIND

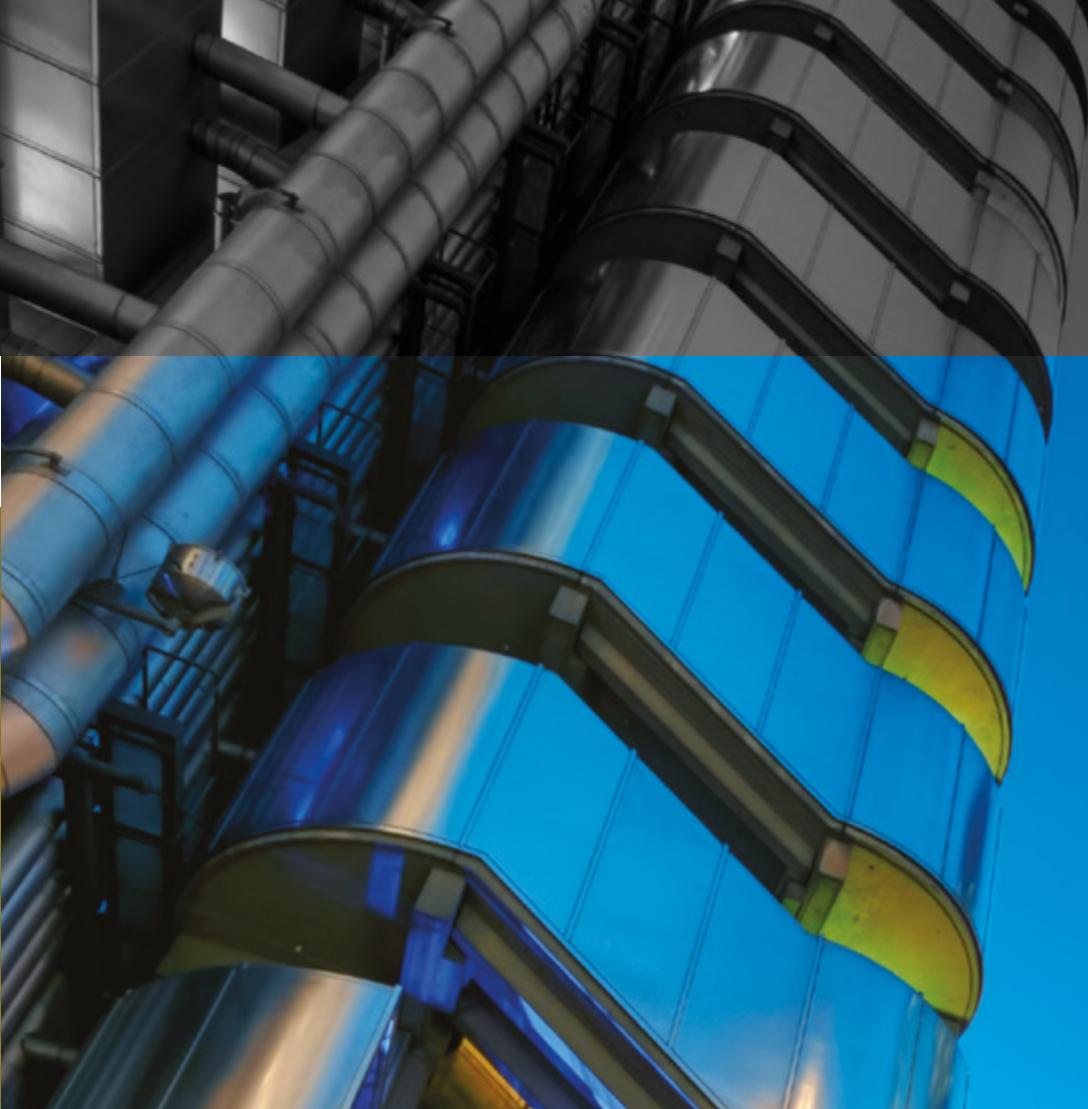




DON'T GET LEFT BEHIND

With uncertainty reigning in markets around the world and projects more complicated than ever before, disputes are taking longer to resolve which can have far reaching consequences

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INTRODUCTION

Welcome to the Sixth Annual Arcadis Global Construction Disputes Report 2016, which reveals key themes and insights into the global construction disputes market. Any dispute is case specific, so to endeavour to group causes and develop averages can risk omitting critical information related to the overall nature of the dispute. However given our range and depth of the coverage, dispute trends, both globally and regionally, are indicative of market trends.

We have taken an in-depth, data-driven review of our projects and disputes globally in 2015 and focused on five key areas: the length of disputes, average value, common causes, most popular resolution methods and region-specific nuances. This report also includes an overview of the macroeconomic market position and goes on to cover all regions in which the Arcadis Contract Solutions team operates, including North America, UK, Continental Europe, Middle East, Asia and a new section on Australia.

It is commonly known in the industry that a substantial percentage of disputes are settled before they become formalized. In the unlikely case a dispute is to materialize formally, both parties involved could see themselves in a situation where differing views and interests could prolong the dispute. Setting aside the different drivers and motives of both parties involved, it is generally agreed that a speedy settlement of any dispute is desired, but why?

- To use current and available people and documents, which are directly relevant;

- to maintain cash flow within the supply chain;
- to maintain party relationships;
- to keep the respective delivery teams focused on delivering the project; and
- to avoid a cumulative effect of minor issues being aggregated into large disputes.

These reasons are largely self-evident, and it is aspirational to suggest that all disputes can or need to be settled quickly. Even so, we must continue to embrace the many initiatives that are being deployed by construction professionals, lawyers and the judiciary across the globe, and do all we can to facilitate the settlement of such disputes. This means that effective dispute avoidance mechanisms need to be actively deployed as early as possible within a project, and involvement of the right expertise and support at the right time is critical.

In 2015 the construction industry faced head winds in particular with commodity and currency volatility. This resulted in many projects and programs being faced with a very different economic business



case than had been planned, which contributed to some of the issues and disputes that have materialized. In particular the natural resources markets and some of the major Engineering, Procurement and Construction (EPC) contracts have run into some substantial disputes, with billions of US dollars in contention. There has also been a rise in the number of insolvent companies and terminated contracts, which are no doubt linked to the current economic environment.

In the last year we have also had two cases which provide helpful guidance on important aspects of construction dispute resolution. The first related to the application of Liquidated Damages, and the other an important reminder to us all that being an experienced construction professional doesn't necessarily qualify you to be an expert in this field. Both of these cases are discussed in more detail in the summary.

We hope that you enjoy this edition, and if you have any feedback or insight that you wish to share please contact us.



THE WORLD ECONOMY IN 2015

The economic trends that impacted disputes

The global recovery from the 2008 financial crash continued in 2015, but at an ever slowing pace. Future prospects are looking increasingly fragile. The baseline projection for global growth in 2016 is a modest 3.2% according to the International Monetary Fund, which is broadly in line with 2015, but a 0.2% downward revision from January 2016. Recovery is projected to strengthen in 2017 and beyond, driven primarily by developing economies as conditions in these stressed markets gradually normalize. However, there are big risks in the forecasts and some turbulence is expected in markets, which could, in turn, affect the level of construction disputes.

The end of 2015 and beginning of 2016 saw renewed episodes of global asset market volatility. Commodity and currency prices have also fluctuated a great deal, increasing the levels of uncertainty underpinning commercial arrangements. Despite an improvement in market sentiment during the first quarter of this year, business conditions remain challenging, highlighted by weak financial data from China and further loosening of fiscal policy in Europe and Japan.

Much like the aftermath of the financial crash of 2008, the loss of growth momentum in some markets including Russia and Brazil is likely to impact on construction volumes, leading to disputes surrounding the cancellation, suspension, termination or restructuring of projects. Elsewhere in markets that are seeing some recovery in demand such as mainland Europe, persistently low background inflation can be expected to affect contractors' ability to secure expected levels of returns on projects.

A major cause of the global economic slowdown has been a fall in investment demand. This has been the case particularly for commodity exporting countries whose terms of trade have collapsed. If the forward pipeline of construction-related projects further weakens in these countries, those involved in construction projects may focus efforts on maximizing returns from existing projects through disputes rather than pursuing future projects.

China is navigating a complex transition away from a high growth, investment and export-



led economy towards a more sustainable path based on consumption and services. In the meantime, Chinese developers and contractors have been diversifying away from home markets. While they have shown themselves to be adept at operating in overseas markets, these organizations are challenged to adapt to the business cultures and construction practices of mature developed markets. Two unexpected spill-over effects of China's slowdown in international markets could be an increase in competition for work – resulting in lower entry prices – and an increase in disputes as new entrants to markets align themselves to established ways of working.

As previously stated, turbulence in commodity and currency markets over the past 12 months may have exposed clients and their contractors to unexpected financial outcomes that could potentially trigger problems on a project. Crude oil was priced at \$44 a barrel in April 2016, down 32% year on year, but up by over 50% in the first quarter from the low point of the cycle. Similar movement has been seen in currencies. These wild fluctuations are likely to affect some parties in a supply chain if appropriate price hedging has not been put in place. Currencies and commodities are likely to remain unstable and could well trigger wider problems on projects going forwards.

Finally, in 2016, no review which includes the UK and Continental European markets would be

complete without a mention of Brexit¹. Brexit fears appear to be having an impact on investment decisions, but the direct impact of either outcome of the referendum on construction is likely to be more limited. However, given that so much of the debate in connection with the referendum concerns free-movement of labor, it is conceivable that any changes to labor market rules could affect the ability of contractors to meet long-term project commitments. This is a long-term risk, but as skills shortages are such a big issue in many markets, the ability of designers and contractors to find the abilities to deliver projects to cost, time and quality expectations, could turn out to be a significant trigger for project problems and possible disputes over the next few years.

On the bright side, despite the global slowdown impacting on economies worldwide, one benefit is likely to be interest rates remaining low, as countries continue to apply fiscal stimulus. We are therefore unlikely to see a reduction in viability due to increases in the cost of finance.

All together these factors will contribute to a challenging economic environment over the next year both in emerging and developed economies.

¹ The referendum vote on whether the UK will withdraw from the European Union.



OVERALL FINDINGS

- **The global average value of disputes was US\$46million.**
- **The global average length of disputes was 15.5months.**

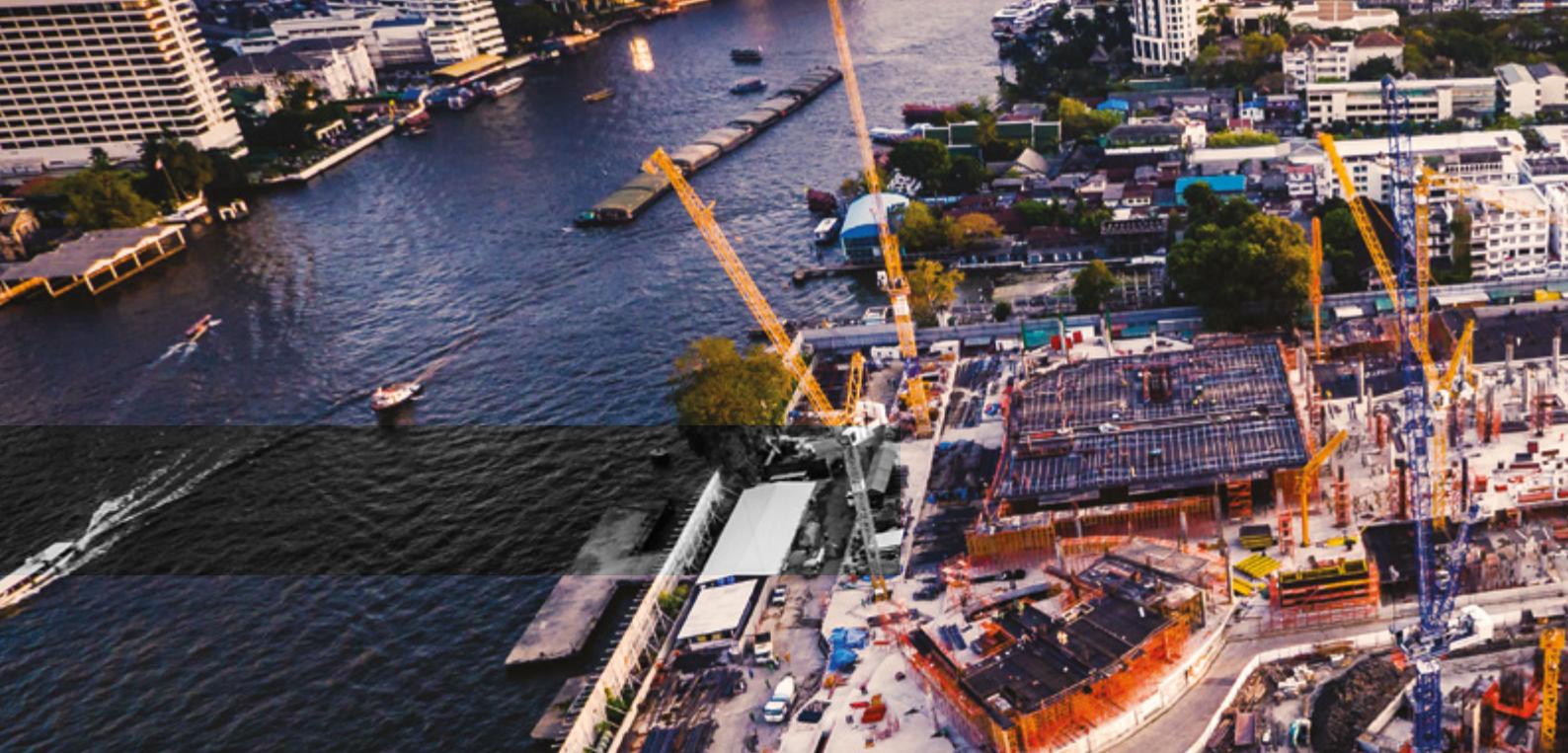
We define a 'dispute' as a situation where two parties typically differ in the assertion of a contractual right, resulting in a decision being given under the contract, which in turn becomes a formal dispute.

The value of a dispute is the additional entitlement to that included in the contract, for the additional work or event which is being claimed. The length of a dispute is the period between when it becomes formalized under the contract, and the time of settlement or the conclusion of the hearing.

The results below show that disputes globally have marginally reduced, but the durations have markedly increased. The increased length of disputes will have multiple effects for both parties and are likely to, ultimately, have a negative impact on the construction industry.



REGION	DISPUTE VALUES (US\$ MILLIONS)						LENGTH OF DISPUTE (MONTHS)					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Middle East	56.3	112.5	65	40.9	76.7	82	8.3	9	14.6	13.9	15.1	15.2
Asia	64.5	53.1	39.7	41.9	85.6	67	11.4	12.4	14.3	14	12	19.5
North America	64.5	10.5	9	34.3	29.6	25	11.4	14.4	11.9	13.7	16.2	13.5
UK	7.5	10.2	27	27.9	27	25	6.8	8.7	12.9	7.9	10	10.7
Continental Europe	33.3	35.1	25	27.5	38.3	25	10	11.7	6	6.5	18	18.5
GLOBAL AVERAGE	35.1	32.2	31.7	32.1	51	46	9.1	10.6	12.8	11.8	13.2	15.5



Dispute causes – poor contract administration most common

2015 RANK	CAUSE	2014 RANK
1	Failure to properly administer the contract	1
2	Poorly drafted or incomplete and unsubstantiated claims	2
3	Errors and/or omissions in the contract document	3
4	Incomplete design information or employer requirements (for Design and Build)	New
5	Employer/contractor/subcontractor failing to understand and/or comply with its contractual obligations	4

A new cause in the rankings is related to incomplete design information, which is considered to be linked generally to the poor quality of design information, and a proportionate increase globally in the use of design and construct forms of contract. The implementation of EPC forms of contract have been particularly problematic in certain industries.

The property/real estate sector had the most disputes. This was closely followed by the social infrastructure/public sector, albeit the natural resources sector has some of the largest disputes.

The highest value dispute handled by the team in 2015 was worth US\$2.5bn.



Resolving disputes – let's talk

2015 RANK	METHOD OF ALTERNATIVE DISPUTE RESOLUTION	2014 RANK
1	Party to party negotiation	1
2	Mediation	2
3	Arbitration	3

The most important activities in helping to avoid a dispute were considered the following:

- 1 Proper contract administration
- 2 Fair and appropriate risk and balances in contract
- 3 Accurate contract documents

In addition to this, one feature that was also discussed within the key inputs to avoiding a dispute was the role (and perhaps return) of the need for a truly independent certifier.

In reviewing the overall findings we find that, when compared to previous years, we gain the following headline insights into global disputes:

- They have decreased marginally in value;
- they have increased in duration;
- the most common cause is still a failure to administer the contract;
- Where a Joint Venture (JV) was in dispute, 25.5% of cases were due to a JV-related issue; and
- party to party negotiation is still the most common form of resolving disputes.

We have found that these trends are symptomatic of the work that we have undertaken, and provides a helpful insight into global trends.

Programs of work are being aggregated into various delivery models, at a time when key features are evident in the global market, and may well be of a direct contributory relevance to the disputes themselves, including:

- Commodity and currency volatility;
- legacy effects of tenders priced in the immediate aftermath of the financial crisis and the ensuing economic recession;
- rising global cost base and strain upon the supply chain;
- scarcity of labor and professional staff;
- significant reduction in the oil and natural resources price that has caused a radical rethink of strategy and delivery across the major programs.

Beneath the headline data of our research, many of these factors have also proved to be a contributory feature within the dispute environment and are considered to be key factors in ensuring that you “Don’t get left behind”.



NORTH AMERICA

	DISPUTE VALUES (US\$ MILLIONS)						LENGTH OF DISPUTE (MONTHS)					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
North America	64.5	10.5	9	34.3	29.6	25	11.4	14.4	11.9	13.7	16.2	13.5

Both the time taken to resolve disputes and the values involved in North America actually dipped slightly between 2014 and 2015. Dispute values have seen a moderate incremental decline since 2013 when they were the highest since 2010. The duration of disputes in 2015 also fell from 2014 levels and has moderated closer to the five-year average, at approximately 12 months. We expect that the decline in duration and

value will continue into 2016 as the industry continues to recognize the importance of addressing disputes early in their lifecycle, and contracts are written with provisions giving strict instruction on how and when to address disputes. This early intervention allows disputes to be evaluated more quickly before damages and emotions swell impeding settlement.

2015 RANK	CAUSE	2014 RANK
1	Errors and/or omissions in the contract document	1
2	Failure to properly administer the contract	New
3	Differing site conditions	2

For the second year running, the most common cause for disputes in North America during 2015 was errors and/or omissions in the contract documentation. Differing site conditions dropped down a place to third

and a failure to properly administer the contract – the top cause globally – came in second position.



In North America, where a JV was in place, the proportion of disputes caused by a JV-related issue increased slightly from 2014, to just over a fifth of all cases (20.45%).

The three most common methods of Alternative Dispute Resolution that were used during 2015 in North America were:

- 1 Party to party negotiation
- 2 Mediation
- 3 Arbitration

The global pattern is that dispute durations are up and the same is true in North America. While durations are up, dispute values and the quantity of disputes have declined. Less and less disputes progress through the stages of initial assessment to evaluation to negotiation and then all the way through litigation.

There are several reasons for this change in behavior. Both owners and contractors in North America have come to appreciate how expensive and time consuming the formal dispute resolution process can be. Legal fees, consultant fees and business distraction have prompted the construction industry to consider quicker and less costly ways of addressing disputed issues. In recent years, provisions have been included in many major construction contracts that outline a specific procedure for addressing disputed issues. The result, which is evident in the survey responses, is that the field staff of active projects

are resolving most disputed issues and less and less disputed issues grow beyond adolescence and into a full “blown” dispute with consultants and counsel involved. It is no secret that US courts are reluctant to try construction cases. They are complex and contain large volumes of documents. These factors actually extend durations of disputes as parties are encouraged to settle and the courts will give them the time do so.

There is an alternate effect on the project participants addressing and coming to an early agreement on many disputed issues. Disputed issues that remain and grow into full disputes are complicated and have large damages and will take a long time to resolve.

It would be a surprise to see durations of disputes ever decrease to lower than several months. While the industry is getting better at proactively addressing disputed issues, as long as people are building, there will be complicated disputes that will take time to resolve.



ASIA

	DISPUTE VALUES (US\$ MILLIONS)						LENGTH OF DISPUTE (MONTHS)					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Asia	64.5	53.1	39.7	41.9	85.6	67	11.4	12.4	14.3	14	12	19.5

Dispute values in Asia actually dropped significantly during 2015, hitting an average of US\$67m. Meanwhile, the amount of time taken to resolve Asian disputes rose substantially.

2015 RANK	CAUSE	2014 RANK
1	A failure to properly administer the contract	1
2	Failure to make interim awards on extensions of time and compensation	2
3	Poorly drafted or incomplete and unsubstantiated claims	3

In 2015, a failure to properly administer the contract remained the most common cause behind disputes.

Poorly drafted claims has kept its place in the rankings, where we have seen a growing trend for global and/or total cost claims. Common causes of this approach to claims is either an individual or

combination of the desire for a speedy submission, lack of substantiation, lack of capability to prepare a robust and credible claim, or the complexity of issues to be claimed.

Where a JV was in dispute, a JV-related difference was more likely to be the cause in Asia, being so in 41.4% of cases.



The three most common methods of Alternative Dispute Resolution that were used during 2015 in Asia were:

- 1 Party to party negotiation
- 2 Arbitration
- 3 Mediation

In 2015 we have seen an overall reduction in the value, but an increase in the duration of the disputes in the region. While the overall value has reduced, the Asian based disputes are still approximately 45% higher than the global average. From a market perspective, we find that although there is a construction slowdown in China, the Hong Kong and Singapore markets are now facing challenges that are presented by large scale infrastructure projects nearing completion.

To address both historic and current issues regulatory changes have been implemented. Hong Kong introduced the Rights of Third Parties Ordinance on 1 Jan 2016 and the Security of Payment is due in 2017. Singapore meanwhile is currently in consultation on a Mediation Bill, which looks to strengthen the overall framework for the use of Mediation. It is

also interesting to note that both the Hong Kong International Arbitration Center and Singapore International Arbitration Center remain very active in the number of both institutional and ad hoc arbitrations in the region.

We are predicting an increase in the number of disputes that we will be dealing with in the coming year. With this in mind, combined with project status and lack of desire by parties to have long and protracted disputes, we are likely to see a further increase in the use of ad hoc forms of Alternative Dispute Resolution, which we are currently experiencing in the region. Some of the leading institutions in the region have actively embraced and deployed such mechanisms to good effect in 2015, and this may be part of a recipe to reduce the regional statistics.

Finally, with a hardening economy in the region and the stakes so high for both parties, it's perhaps not a time to be passive in looking at how to address issues that arise on the projects, but to actively seek to resolve issues before they become a formal dispute.



MIDDLE EAST

	DISPUTE VALUES (US\$ MILLIONS)						LENGTH OF DISPUTE (MONTHS)					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Middle East	56.3	112.5	65	40.9	76.7	82	8.3	9	14.6	13.9	15.1	15.2

The Middle East region saw its dispute values increase, once more, to their highest value since 2011. However, the amount of time taken to resolve disputes remained more-or-less static.

2015 RANK	CAUSE	2014 RANK
1	A failure to properly administer the contract	1
2	Poorly drafted or incomplete and unsubstantiated claims	2
3	Incomplete design information or employer requirements (for Design and Build)	New

A failure to properly administer the contract remained the most common cause of dispute in the region, followed by poorly drafted or incomplete and unsubstantiated claims which, once again, demonstrates the need to get the basics right from the very start.

In the Middle East, where a JV is in place, the proportion of disputes caused by a JV-related issue dropped in 2015, moving down almost ten percent to 32.3%



The three most common methods of Alternative Dispute Resolution that were used during 2015 in ME were:

- 1 Party to party negotiation
- 2 Arbitration
- 3 Mediation

In an economic environment impacted by the oil price, the market continues to see a restriction in decision-making within the industry. This drives a lack of appropriate delegation to project management consultants and client representatives, thereby prolonging critical commercial decisions and generating cash flow issues related to instructed variations. Some clients are looking to spread cash obligations by prolonging commercial payments and negotiations. Additionally, the tendency to utilize a traditional contracting strategy is ill-suited to the continuing size and complexity of the programs. This is exacerbated by the propensity of clients to transfer the majority of project risk to contractors.

However, there is a desire from all parties to better streamline formal dispute processes, reduce administrative burden and create a fairer contracting model. There is a noticeable shift in the use of

Mediation and Adjudication instead of the traditionally contracted Litigation/Arbitration methods. All parties embrace the added value that an impartial professional judgement/recommendation brings to the settlement of disputes, which is not only cheaper and more expeditious, but also transfers decision-making to external agents, thereby assisting with state audit compliance. The market is further increasingly utilizing design and build contracting models and has even experimented with the New Engineering Contract (NEC) suite. Public-private partnerships are also growing in popularity as inward investment is coveted to mitigate budget deficits generated by low oil prices. This shift in strategic procurement can only be beneficial to the continued growth of construction in the Middle East and maintain its attractiveness to international contractors and consultants.

While the region is experiencing a challenging period, the opportunities and potential rewards for contractors and consultants remain. As better compliance and cost optimization initiatives are introduced by private operators and governmental entities, the market will improve as an environment within which both domestic and international organizations can thrive.



UK

	DISPUTE VALUES (US\$ MILLIONS)						LENGTH OF DISPUTE (MONTHS)					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
UK	7.5	10.2	27	27.9	27	25	6.8	8.7	12.9	7.9	10	10.7

Construction disputes in the UK dipped for the second consecutive year. However, in keeping with most areas of the world, the time taken to resolve disputes continued to rise. In spite of this, the length of time taken in the UK is the lowest globally.

2015 RANK	CAUSE	2014 RANK
1	Failure to properly administer the contract	1
2	Incomplete design information or employer requirements (for Design and Build)	5
3	Employer, contractor or subcontractor failing to understand and/ or comply with its contractual obligations	2

The causes of disputes in the UK followed a similar pattern to previous years. A failure to properly administer the contract remained the most common cause in 2015, as it did in most areas of the world.

Where a JV was in place, a JV-related issue was the root cause in 12.5% of cases, half that of 2014.

Three most common methods of Alternative Dispute Resolution used during 2015 in the UK:

- 1 Party to party negotiation
- 2 Adjudication
- 3 Mediation



The UK judiciary has sought to reduce the costs of litigation to a proportionate level with the Jackson Report recommendations incorporated into amended 2013 Civil Procedure Rules. Although stopping short of compelling parties to use mediation, judicial pressure to limit costs has exposed an increasing number of parties to its potential benefits. Combined with the continuing commercial pressure on construction executives to minimize the cost of disputes, this has resulted in more mediations and increased party to party negotiation. This trend is expected to accelerate over coming years as mediation continues to gain traction, albeit adjudication will continue to dominate Alternative Dispute Resolution in the UK. This is especially due to the repeal of s.107 of the Housing Grants, Construction & Regeneration Act 1996, providing the opportunity for parties to refer disputes arising out of oral contracts to adjudication.

Practitioners continue to underestimate the paramount importance of payment terms within construction contracts and the financial consequences of failing to abide by them. This was manifested in an increased number of payment disputes, be that employer failure to issue Pay Less Notices or contractors failing in respect of the timing,

form, substance or intent of payment applications. Furthermore, *Grove Developments Ltd v Balfour Beatty* [2016] EWHC 168 (TCC) stands as a warning to contractors of including payment schedules in contracts without expressly stating the procedure should there be an extension of time. The practical implications of losing the right to interim payments disadvantages small and medium-sized enterprises with limited cash reserves, who account for the vast majority of the industry and is therefore contrary to the spirit of recent construction law reform.

The increased prevalence of disputes relating to incomplete design information or employer was found to be a hangover from pre-construction cost saving practices during the economic crisis. As the impact from such practices recedes it is anticipated that poorly drafted claims will again feature strongly.

The UK – London in particular – remains a dispute resolution powerhouse with the legal instruments, institutions and expertise necessary to timely resolve major international disputes.



CONTINENTAL EUROPE

	DISPUTE VALUES (US\$ MILLIONS)						LENGTH OF DISPUTE (MONTHS)					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Continental Europe	33.3	35.1	25	27.5	38.3	25	10	11.7	6	6.5	18	18.5

The value of disputes remained high in Continental Europe, despite a significant drop from 2014. Meanwhile, the length of time taken to resolve disputes edged up to 18.5 months.

2015 RANK	CAUSE	2014 RANK
1	Conflicting party interests	New
2	Incomplete design information or employer requirements (for Design and Build)	5
3	A failure to properly administer the contract	3



Conflicting party interests were the most common cause of disputes during the year, while a failure to properly administer the contract dropped down to third place.

Across Continental Europe, where a JV was in place, a JV-related issue was the cause in 17.7% of cases.

The three most common methods of Alternative Dispute Resolution used during 2015 in Continental Europe:

- 1 Party to party negotiation
- 2 Arbitration
- 3 Mediation

Although party to party negotiation is still the most common form of dispute resolution, we are observing some changes in the market, with this change becoming most evident in some of the largest Continental European markets. Investments located in Southern Europe (Spain, Italy and France) are more frequently resolved through court or arbitration proceedings rather than through negotiations between the parties during the realization stage. This trend seems to be increasing and therefore proper preparation of documents in order to effectively conduct legal proceedings is becoming a fundamental requirement.

In Central and Eastern Europe, the number of out-of-court settlements is still insignificant. Disputes are usually resolved by court proceedings and, on a smaller scale, by arbitration. This situation results from the lack of decisiveness of public employers in terms of accountability for out-of-court settlement of disputes. Initiatives which aim to change the most popular dispute resolution method, such as promotion of alternative dispute resolution methods, still do not bring noticeable changes. However, this seems to be a positive approach where the economic growth forecast of countries like Poland, Czech Republic, Romania and Turkey, indicate a growing market for large infrastructure projects.

All of the above circumstances have led to an environment where Continental Europe is still a region in which resolving a dispute is a time-consuming process, with the second longest-lasting disputes after Asia. This fact is even more puzzling when we consider the relatively low value of disputes (over two times lower than in Asia). Also worthy of note is the fact that the disputes in the UK, which have a comparable value, are resolved on average in half the duration of disputes in Continental Europe.



AUSTRALIA

As Arcadis expands its geographical footprint, we find ourselves able to draw upon new market insights from our 2014 Hyder Consulting acquisition and our growing presence and activity in the Australian market. Next year's report will provide a more in-depth review and context, based on findings and viewpoints from 2016. In the meantime, below is a general insight into the Australian construction and dispute market.

The outlook for Australia's construction sector remains subdued, particularly as its mining sector declines and the oil and gas sector is nearing completion of its capital expenditure stage. However, the commercial and residential sectors continue to show solid growth and the transport infrastructure sectors continue to recover, being forecast to show steady growth with an upswing in new projects.

The mining sector is likely to continue to see decline in the number and value of new projects, on the back of continued weakness in commodity prices, with reduced activity in mining related construction activity. This sector continues to explore and implement cost-cutting and production efficiency programs.

There is a significant increase in the number of road and rail projects planned for Victoria and New South Wales. State governments are increasingly using public-private partnership contract mechanisms to privately fund the infrastructure concessions, with the government bodies retaining patronage risk, while continuing to develop innovative availability abatements and Key Performance Indicators.



Residential and commercial developments have posted solid growth recently, supported by low interest rates, and the outlook for the commercial sector is a period of strong growth with a number of major developments in the pipeline.

Australia has recently seen a huge surge in the construction of extremely large natural resources projects, particularly in Western Australia and Queensland, with many of these projects now nearing completion. We believe that this sector is potentially going to be exposed to a wave of multibillion-dollar disputes between producers and contractors over liability for cost increases and project delays. What makes the natural resources sector unique is the size and sheer magnitude of the supply chain and

sums involved. Commodity prices continue to remain flat, new investment in capital projects has wound back and the slump in resources investment and commodity prices sharpens appetites to minimize or maximize respective positions.

Current typical reasons for disputes include:

- Haste to get product to market;
- inadequate risk allocation between contracting parties; and
- incomplete contract documentation.



SUMMARY

Our regional commentaries have given some insight into the common causes and features of disputes in each region. We consider that these themes provide a helpful reference point to typical trends both regionally and globally. It is evident that the natural resources market is now operating against a very different economic backdrop. The business case assumptions that were likely used to endorse projects and programs have therefore changed, presenting a huge challenge to the project and entity risk profiles. The disputes in this sector have been a material feature in the last 12 months and will continue to be evident in the coming year.

We have established that globally the following key dispute themes have prevailed:

- **The average value has marginally reduced to US\$46m.**
- **The average length has increased to 15.5 months.**
- **The most common cause is still the failure to properly administer the contract.**

A continuing trend over the last six years is that, on average, disputes have increased in value and duration, with the notable increase this year in the length of time taken to resolve disputes. Therefore our theme this year of “*Don’t get left behind*” is focused around making sure that in recognizing what causes disputes, avoidance mechanisms can be actively deployed to

resolve issues as they materialize. Furthermore, if a claim then does progress into a formalized dispute, actively deploying key support and expertise, effective strategies and the active use of Alternative Dispute Resolution (ADR) will assist in reducing the time it takes to resolve the dispute.

Considering why the length of disputes has increased is likely to be a mix of the following factors:

- An increase in the size of disputes that Arcadis has been instructed to act;
- an increase in the number of large and complex EPC disputes;
- the disputes that are formalized are including multiple or whole contract issues, rather than referring discrete claims; and

- adjudication or some forms of ADR in some regions is not providing a solution that is acceptable to the parties.

Some interesting features of the regional overviews have highlighted the following trends in some or all of the markets:

- The effect of the global commodity and currency volatility;
- the earlier deployment of dispute avoidance mechanisms;
- the increasing use of mediation, and refinement of other forms of ADR; and
- a reliance from public or quasi-public bodies to require third party decisions, to assist in retaining complete ‘arm’s length’ decision making.



This year, consistent with last year, we have noted the following additional features, which include:

- Mega disputes, with the largest dispute we have been engaged in this year exceeding US\$2.5bn; and
- a notable increase in the volume of arbitrations.

The majority of construction disputes are resolved privately and so we tend to have very few reported cases, however in 2016 there were amongst others two cases which merit a mention. The first is *Cavendish Square Holdings BV –v- El Makdessi and Parking Eye Ltd –v- Beavis* [2015] UKSC67, in which the notion of a liability for delay damages might be challenged if the rate of damages is not a genuine pre-estimate of

the actual loss. The Court made it clear that delay damages will only be considered to be penal, and so unenforceable, if the damages are extravagant to the point of being unconscionable.

The second case is worthy of note on two fronts, because it provides a very helpful reminder and checklist of what is required of an Expert Witness, and also because the other expert in this case who was used as a reference point of what should have been undertaken was Gary Kitt (UK Leader of Arcadis Contract Solutions). The case was *Van Oord UK Limited & Sicim Roadbridge Limited –v- Allseas UK Limited* [2015] EWHC 3074 (TCC), in which the Court clearly set out 12 rules of what is required of an expert, and it is suggested that the full judgement should be read and

considered in the context of the widely referenced 'Ikarian Reefer' case and guidelines.

Thank you and we hope that you have enjoyed this year's edition.



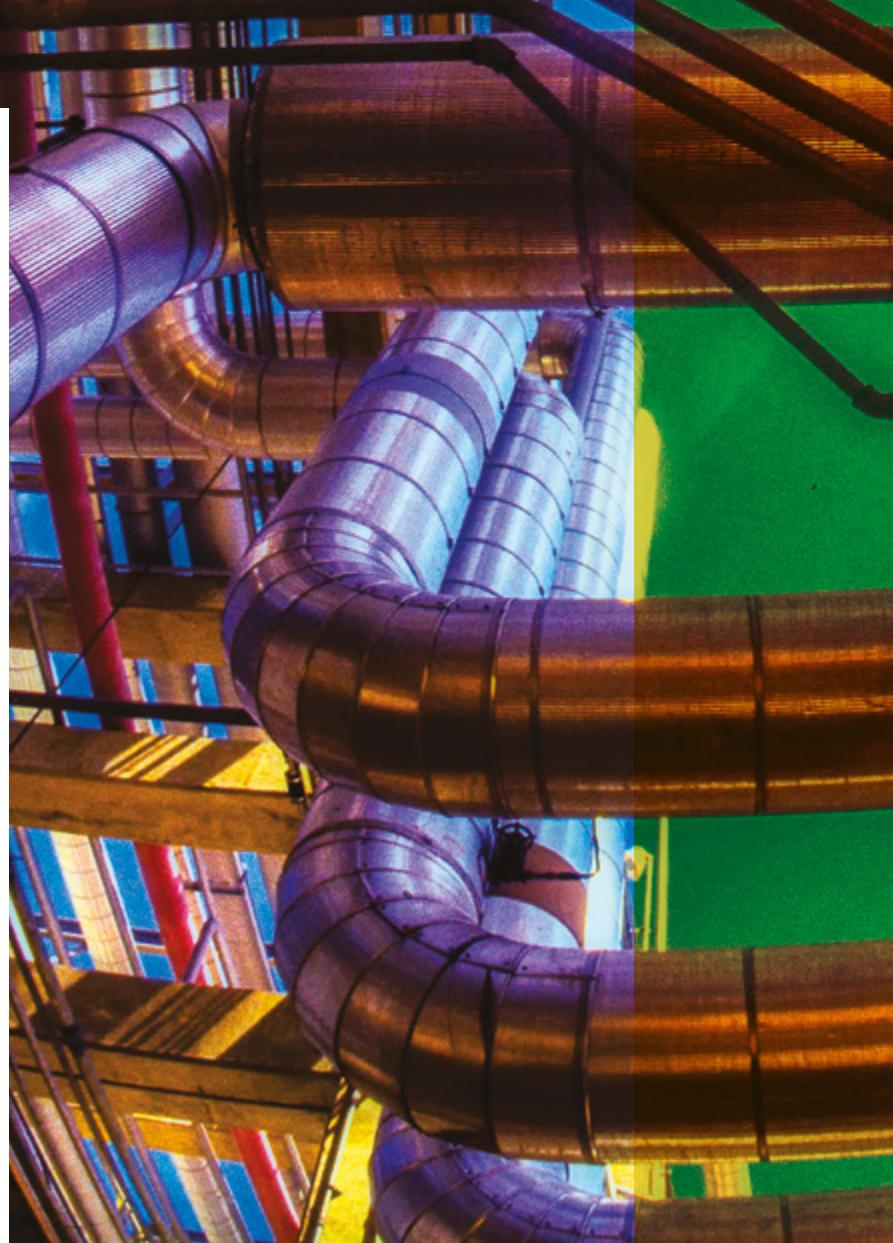
METHODOLOGY

This research was conducted by the Arcadis Contract Solutions experts and is based on construction disputes handled by the team in 2015.

Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 27,000 people active in over 70 countries that generate €3.4 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world
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CONTRACT SOLUTIONS EXPERTISE

Arcadis' Contract Solutions teams help clients avoid, mitigate and resolve disputes. The team is based around the globe and encompasses one of the industry's largest pool of procurement, contract, risk management and also quantum, delay, project management, engineering defects and building surveying experts.

The team provides procurement, contract and dispute avoidance and management strategies, management expertise as well as dispute resolution and expert witness services. This is delivered through a blend of technical expertise, commercialism, sector insight and the use of live project data, combined with a multi-disciplined and professional focus.





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