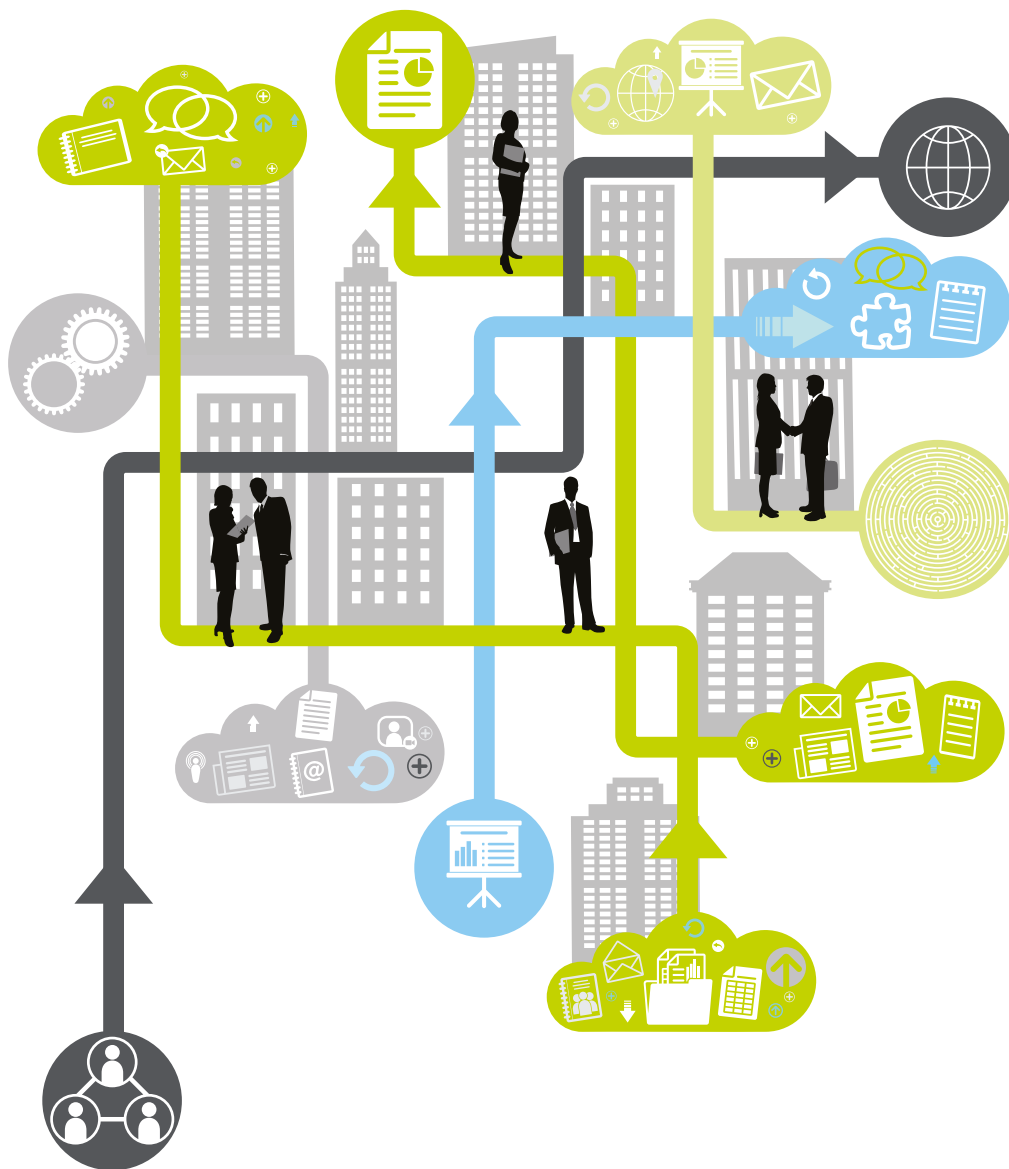


GLOBAL CONSTRUCTION **DISPUTES 2014**

Getting the basics right



Foreword

Welcome to our fourth annual report on the key issues we find prevalent in the construction disputes market. Over previous years this report has generated significant interest from both the technical and general media, as well as from a number of professional institutions. I hope that you find the data and insights outlined in this year's report of interest too.

Whilst there are regional-specific market nuances, the general issues seem to stem from some common market traits: construction schedules are fast paced, projects are typically aggregated into complex programmes of work, there is a lack of skilled manpower and professionals and there is a continued trend of multi-layering contractors and subcontractors. Furthermore, dispute resolution, in particular Alternative Dispute Resolution (ADR), is continuing to adapt and modify to the market need for self-determination and speed.

There has not been any case law this year that one would call 'landmark' in terms of setting important practical precedent. However, helpful guidance is still being gleaned from the 'Walter Lilly' case and there continues to be some judicial criticism of experts with some valuable insights being shared in these judgements.

Against this market backdrop we have seen a growing trend of the 'mega dispute', which could typically be described as having 'a disputed sum in excess of US\$1 billion'. We are currently involved in three disputes of this size across different regions.

Our theme for this year's report is based on reflections on the key outputs from our analysis, and shows that 'getting the basics right' along with pro-active risk management would significantly assist in removing the common causes of disputes. Poor Contract Administration has risen to be the number one cause of disputes. A concerning trend along with that development is that joint venture disputes have almost doubled in comparison to last year. The Middle East and Asia still have, by proportion, the largest value disputes which typically represent the current construction output data.

Within the latter parts of this report we will explore how we might try to address some of these common causes and I would be happy to discuss these in detail with you.



Mike Allen
Global Head of Contract Solutions
Arcadis



Summary of findings

Figure 1: Overall findings

Region	Dispute values (US\$ millions)				Length of dispute (months)			
	2010	2011	2012	2013	2010	2011	2012	2013
Middle East	56.3	112.5	65	40.9	8.3	9	14.6	13.9
Asia	64.5	53.1	39.7	41.9	11.4	12.4	14.3	14
US	64.5	10.5	9	34.3	11.4	14.4	11.9	13.7
UK	7.5	10.2	27	27.9	6.8	8.7	12.9	7.9
Continental Europe	33.3	35.1	25	27.5	10	11.7	6	6.5
Global Average	35.1	32.2	31.7	32.1	9.1	10.6	12.8	11.8

Figure 2: Dispute causes – poor contract administration most common

2013 Rank	Cause	2012 Rank
1	Failure to properly administer the contract	3
2	Failure to understand and/ or comply with its contractual obligations by the Employer/ Contractor/Subcontractor	2
3	Incomplete design information or Employer requirements	New
4	Failure to make interim awards on extensions of time and compensation	4
5	Poorly drafted or incomplete and unsubstantiated claims	1

- Average dispute values increased by US\$400,000 in 2013 to US\$32.1million
- US dispute values increased the most in 2013, although Asia and the Middle East still have the highest value disputes, on average;
- The average length of disputes has fallen by a month to less than a year, but has increased in the US and Continental Europe;
- The most common cause is a 'failure to properly administer the contract';
- A new cause appearing in the top five is 'incomplete design information or employers requirements';
- Where a Joint Venture (JV) is in place, a JV related difference now has a one in three chance of driving a dispute (previously one in five);
- Two thirds of our respondents said that there was no sign of any increase in the use of collaborative practices to reduce the number of disputes;
- The transportation sector had, by proportion, the most number of disputes; and
- The emergence of the 'mega-dispute' with the Arcadis teams working on three separate disputes worth over US\$1billion in 2013 including the Panama Expansion project.

2013 Rank	Method of Alternative Dispute Resolution	2012 Rank
1	Party to party negotiation	3
2	Arbitration	2
3	Adjudication (contract of ad hoc)	1

The single largest impact in avoiding a dispute was:

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

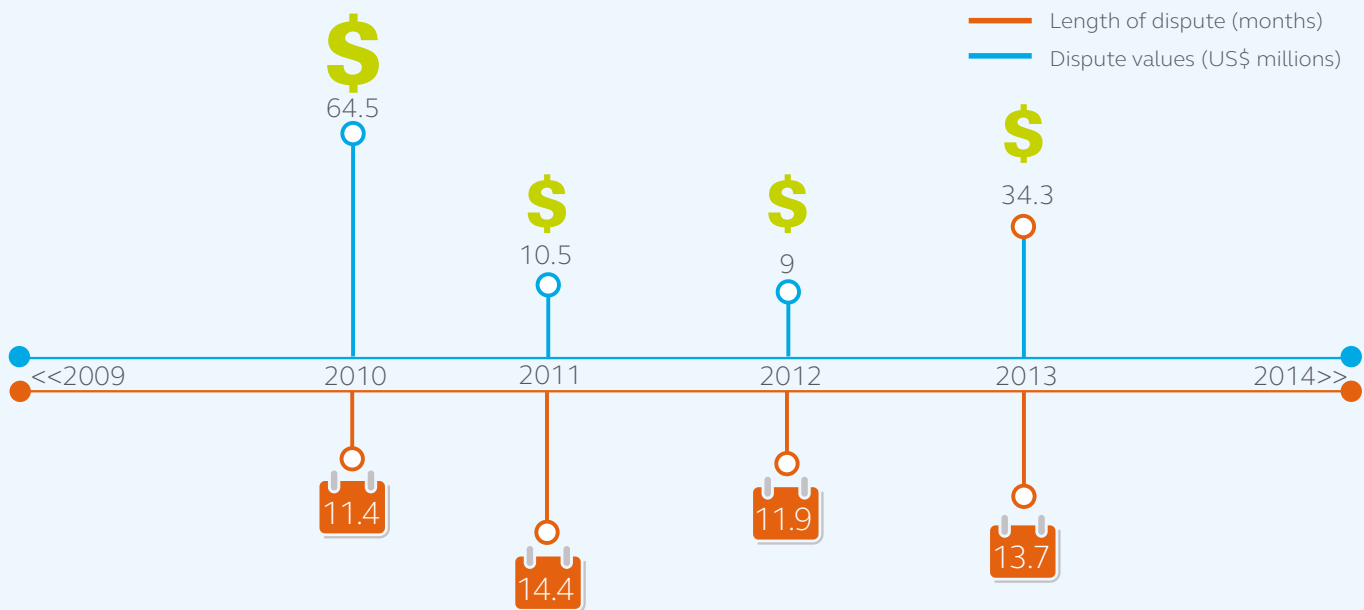
These findings demonstrate that it is of utmost importance to make sure that contracts are administered appropriately by both parties. This also highlights another commonly held view that clear roles and defined authority within teams are critical factors in project delivery and avoiding disputes. The 'people' factor is something that will be returned to later in the report.

It could be said that all three issues above fall into contract administration, but that only tells part of the story. Risk balance and document accuracy are also critical components in both common law and civil code jurisdictions, and continue to be a fundamental feature in the causes of disputes.

USA

Dispute values in the US tripled to US\$34million in 2013 and also took nearly two months longer to be resolved, increasing from 11.9 months in 2012 to 13.7 months in 2013.

These results confirm several significant trends which are continuing to characterize both the occurrence as well as the resolution of claims in the US. Whilst at first it may appear that the characteristics of claims activity can be volatile from year to year, this is a reminder that by their very nature, claims are unpredictable. The occurrence of claims is an unplanned event; likewise the ultimate achievement of resolution is also uncertain in timing.



“The most common cause for disputes in the US during 2013 was errors and/or omissions in the Contract Document”



2013 Rank	Cause	2012 Rank
1	Errors and/or omissions in the Contract Document	2
2	Failure to make interim awards on extensions of time and compensation	5
3	Differing site conditions	4
4	Incomplete design information or Employer requirements (for D&B/D&C)	-
5	A failure to properly administer the contract	-

The most common cause for disputes in the US during 2013 was errors and/or omissions in the Contract Document. This reason moved up from second place in 2012. The inflexibility to make interim awards on time extensions and compensation, moved up to become the second most common reason for a dispute, whilst differing site conditions came third.

This confirms the increasing expectation by owners that contracts should contain the needed remedies to resolve claims and that project management employees of owners and contractors need to properly administer these same contracts in a fashion that accomplishes fair and prompt resolution of disputes. This is confirmed by the fact that the most prevalent method of resolution continues to be direct negotiation or party to party resolution.

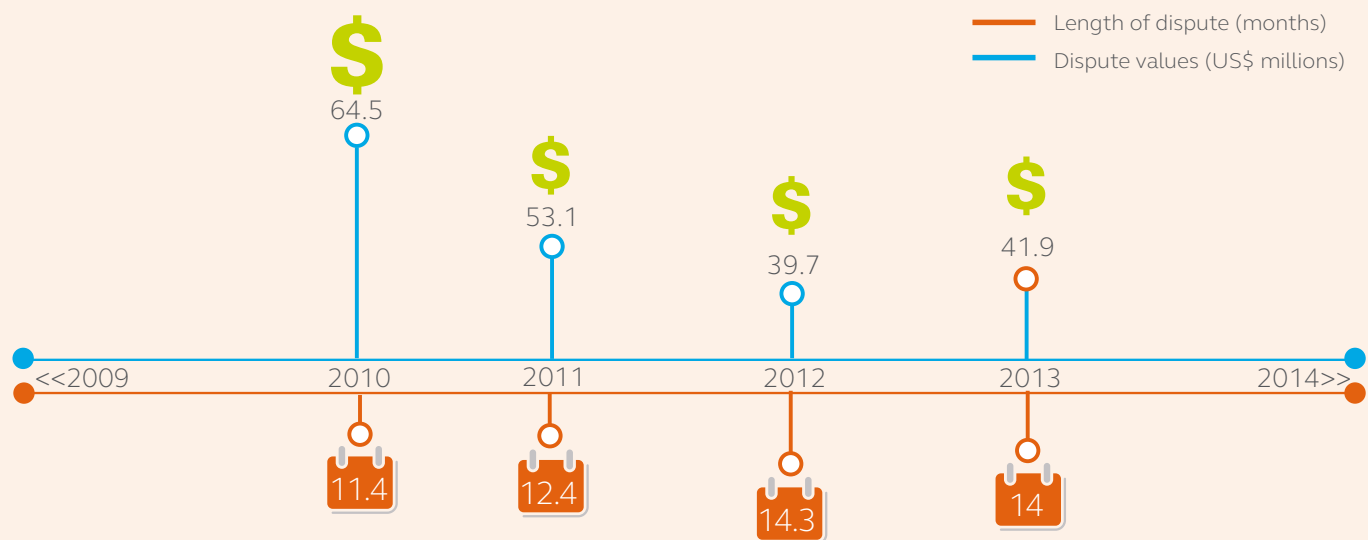
In the US, joint ventures tended to result in dispute in just over a third of cases (36%), in-line with the global average. The increased use of alternative project delivery approaches such as design-build, combined with the frequent involvement of joint ventures as the delivery entity, means that there is a high probability of a dispute either with the owner or within the joint venture team itself. This emphasizes the importance of proactive measures which will enable projects to mitigate or avoid altogether the potential impact of disputes.

The three most common methods of Alternative Dispute Resolution that were used during 2013 in the USA were:

- 1. Party to party negotiation;**
- 2. Mediation; and**
- 3. Arbitration.**

ASIA

Disputes in Asia were the highest value, hitting an average of US\$41.9million in 2013. This was an increase from 2012, but still significantly lower than the dispute values seen in 2010 and 2011.



“The drive force for any tender process is still lowest price”

The three most common methods of Alternative Dispute Resolution that were used during 2013 in Asia were:

1. Party to party negotiation;
2. Arbitration; and
3. Mediation.



2013 Rank	Cause	2012 Rank
1	Failure to make interim awards on extensions of time and compensation	2
2	A failure to properly administer the contract	5
3	A biased PM or Engineer	-
4	An unrealistic contract completion date being defined at tender stage	-
5	Employer imposed change	-

The length of disputes saw a small decrease in 2013 to 14 months, the first drop in dispute time in Asia since this report began. The top reasons for causing a dispute saw quite some change in 2013. A failure to make interim awards on extensions of time and compensation was the most common cause, moving up from second in last year's report. A failure to properly administer the contract moved up to second from fifth.

Joint ventures were least likely to end in dispute in Asia, but still 31% of JVs were likely to do so. The Asia region has a broad geographic and multi-cultural footprint. The choice of procurement route and contracting strategy is determined from country to country depending upon the legal system, local and historical practises, commercial culture and of course the local market conditions prevailing at the time. Since local markets may be at different stages of development and maturity, the correct solution for one market may be unsuitable for another.

However, regardless of location, the commercial basics such as choice of the most appropriate contracting method, choice of consultants and contractor and an understanding of the needs and objectives of the stakeholders for a project should apply universally. Further still, during the construction stage, following the basics of correct and appropriate contract administration, particularly in respect of managing change, and resolving differences should also be universally considered as essential as well as being common sense.

There have been positive moves in some locations; particularly where there is government backed policy to adopt internationally recognised standard forms of

contract such as NEC3. However, in some instances, the vital basics of contract administration required for the successful operation of the standard forms are failing to be carried out, undoubtedly leading to disputes.

Across the region, we still find a daunting spectrum of ad-hoc, bespoke, amended standard forms and contract forms driven more by custom and practice than by commercial principles. The driving force for any tender process, regardless of 'scenery' purporting to award based on capability, is still lowest price. Furthermore, whilst the basic principles of managing risk within the construction team are well known, practice remains to pass on as much risk through the supply chain to stakeholders that are least able to manage and, in some cases, survive it.

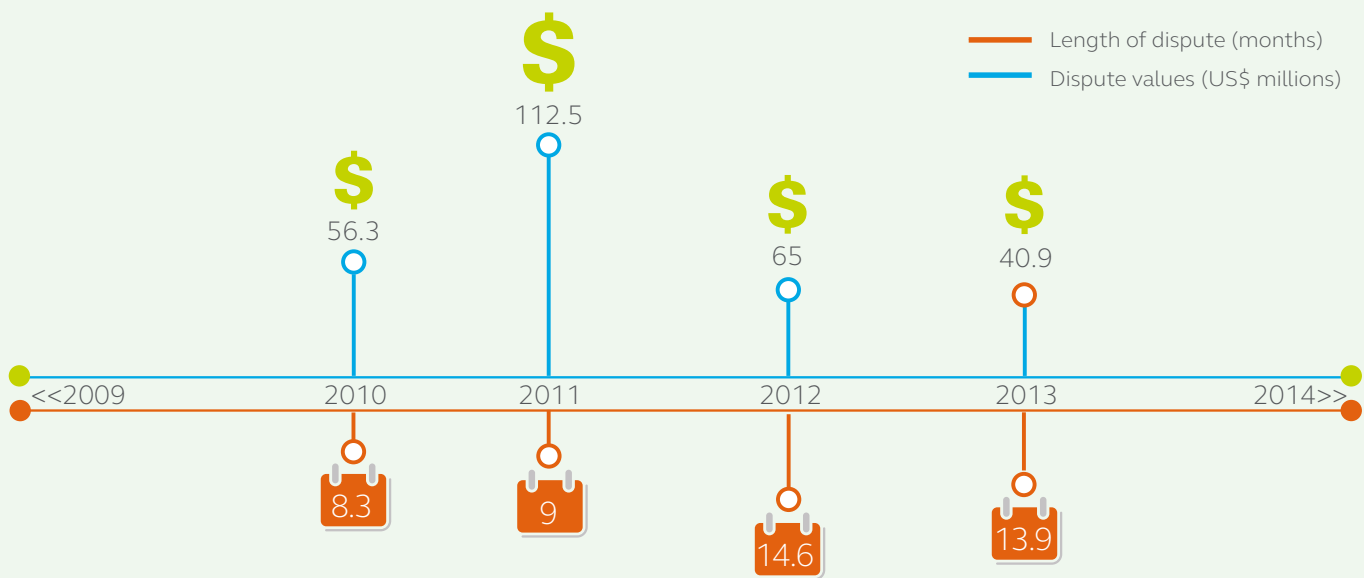
Correct payment continues to be a substantial problem in the Asian construction industry. This naturally follows from incorrect administration of the contract by all parties. Statutory relief in the form of adjudication can be found in countries such as Singapore, Malaysia and Australia, with other countries showing signs of following suit.

Regardless of location, culture, contracting strategy, industry or project complexity, one further factor continues to stand out as a substantial obstacle to correct and fair contract administration. This is the inability to maintain and provide adequate records and the failure to observe obligations, issue correct notices and respond to same timeously.

In summary, by getting the basics right, the effects of the above matters can be kept to a manageable minimum for all parties.

MIDDLE EAST

The Middle East region saw dispute values decrease to the lowest value since the research began at US\$40.9million, down from US\$65million in 2012. After a sharp increase in length last year, disputes time also dropped to 13.9 months on average.



“One striking statistic from disputes in the Middle East was that 46% of joint ventures ended up in dispute during the year”

The three most common methods of Alternative Dispute Resolution that were used during 2013 in the Middle East were:

1. Arbitration;
2. Party to party negotiation; and
3. Expert determination.



2013 Rank	Cause	2012 Rank
1	A failure to properly administer the contract	1
2	Employer imposed change	2
3	Employer/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations	-
4	Errors and/or omissions in the Contract Document	-
5	An unrealistic contract completion date being defined at tender stage	-

A failure to properly administer the contract remained the most common cause of dispute in the region, followed by changes imposed by the employer, which moved up from third place.

One striking statistic from disputes in the Middle East was that 46% of joint ventures ended up in dispute during the year, the highest of any region covered in the report. One of the critical decisions executives must face with any new project is determining how the project will be administered in design, management and administration and selecting the best contractor/consultant for the planned project.

Selecting the method of procurement and form of contract is the first step, unfortunately the Middle East is still experiencing inappropriate forms being used for the type of project and employer's requirements, e.g. EPC contracts are still being used despite it being known that there will be changes to the Employer's Requirements, design and build requirements are also being administered with a build only contract which usually results in claims and potential disputes.

Some clients still seek a 'magic formula' that will avoid disputes by amending standard forms to what they hope will pass on even more risk and deny contractors/consultants the ability to make claims. In our experience this usually results in ambiguities

and conflicts being incorporated into contracts; a recipe for generating claims and potential disputes. Of course there are some bespoke contracts being used that are tried and tested and work very well.

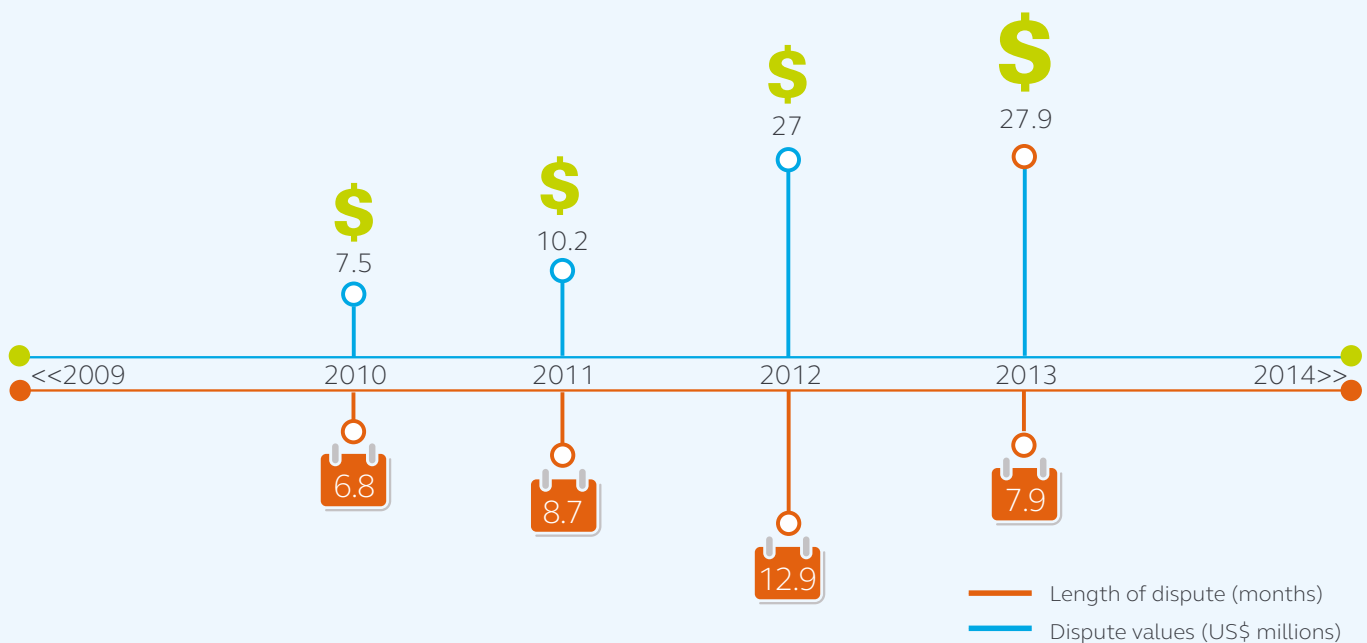
All too often we are witnessing a great deal of time and effort placed in selecting, negotiating and agreeing contract terms and conditions, only for them to be placed in a dusty drawer and not implemented, by both parties. In addition employers are content in passing on all of the risk at the lowest price to contractors/consultants who are only too willing to accept them.

In summary, in answering the question that is often posed, i.e. "how do we avoid disputes?" the recommended response would be as follows: selection of the right form of contract is a crucial first step with minimal amendments in the particular conditions. Selection of the best contractor/consultant who is capable for performing in accordance with the contract, not just the lowest price, comes next. This should be followed by diligently administering the whole contract conditions by both parties from inception to close out.

Passing on all of the risk all of the time to the lowest bidder does not necessarily result in value for money and achieving the right outcome.

UK

Construction disputes in the UK continued to rise in value, reaching an all-time high of US\$27.9million in 2013. However, encouragingly, they took less time to resolve with the average coming down to 7.9 months from 12.9 months in 2012.



“The recent upturn in market conditions and claims by employers for alleged defective works are two of the key drivers causing disputes in the UK”



2013 Rank	Cause	2012 Rank
1	Employer/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations	1
2	Failure to properly administer the contract	3
3	Incomplete design information or Employer requirements (for D&B/D&C)	-
4	Poorly drafted or incomplete and unsubstantiated claims	-
5	Employer imposed change	-

The causes of disputes in the UK followed a similar pattern to previous years, although a failure to understand contractual obligations rose to become the most common cause in 2013. A failure to properly administer the contract was again common, but fell to second place, with incomplete design information remaining third. In the UK a third of JVs ended in dispute, just under the global average.

The recent upturn in market conditions and claims by employers for alleged defective works are two of the key drivers causing disputes in the UK. The more buoyant market means that contractors are more prepared to take action to recover losses that they may have suffered by entering into contracts over the last five years when there was a sharp downward pressure on tender prices. This has also led to a number of speculative claims being submitted, most now citing the Walter Lilly case which is being seen as a panacea for all ills.

What many contractors are missing is that for any claim to succeed it needs to be founded on a robust and well evidenced cause of action, not just reliance on a piece of litigation that, taken at face value, appears to offer a contractor a good chance of succeeding with a claim for loss and expense. In a large number of instances contractors' claims are often met with counterclaims for delay and/or defective works. The latter claims also tend to end up with one of the design team facing claims for

professional negligence thereby creating rounds of satellite litigation generally originating out of a contractor's claim for loss and expense. As in previous years, a significant cause of claims is the parties' own lack of understanding of their respective obligations under the contract, despite which many contractors and clients still remain unwilling to invest any money in pre-contract advice.

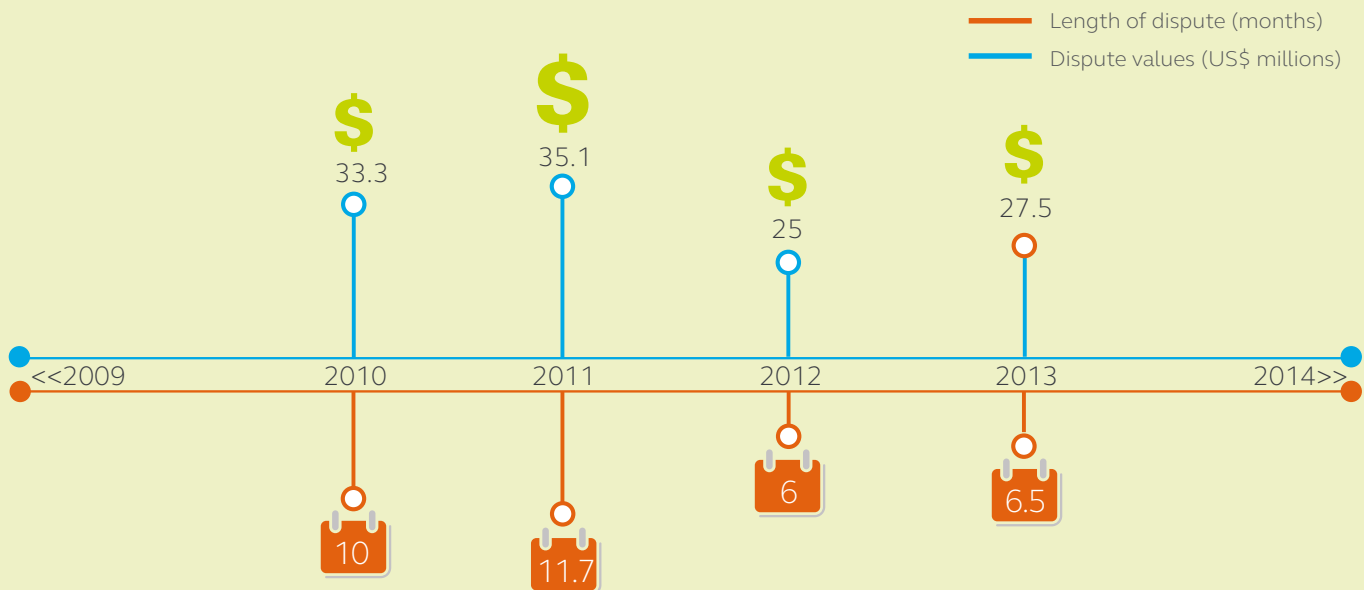
Finally, there has been a growing trend for employers, when defending claims, to take the position that the contractor is culpable of critical delay. This is being seen as a defence to claims for loss and expense. Whilst this is a completely respectable position to take, it is often the case that with the majority of construction disputes being settled by adjudication, this type of defence will succeed only where the adjudicator takes the time to fully comprehend the parties' positions as to the cause and actual effect of delay.

The three most common methods of Alternative Dispute Resolution that were used during 2013 in the UK were:

1. Adjudication (contract or ad hoc (1 in 2012);
2. Party to party negotiation (3); and
3. Arbitration (2).

CONTINENTAL EUROPE

The value of construction disputes in continental Europe crept up again in 2013 following a low of US\$25million in 2012. Dispute values were, on average, US\$27.5million in 2013. Dispute lengths were flat at six months.





2013 Rank	Cause	2012 Rank
1	Differing site conditions	-
2	Third party or Force Majeure events	5
3	Employer/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations	1
4	Employer imposed change	-
5	A failure to properly administer the contract	-

Differing site conditions was the number one reason for disputes in Europe in 2013. Last year's most common cause – a failure to understand and/or comply with contractual obligations fell to third.

38% of JVs ended in dispute in Europe.

The three most common methods of Alternative Dispute Resolution that were used during 2013 in continental Europe were:

1. Party to party negotiation;
2. Adjudication (contract or ad hoc); and
3. Litigation.

Learnings

From the analysis and commentary in this report we can see that the following key themes have come to the fore:

- US dispute values have increased with the Middle East and Asia still having the highest on average value disputes;
- The average length of disputes has marginally reduced;
- The most common cause is a 'failure to properly administer the contract' (risen from number 3);
- A new cause appearing in the top 5 is 'incomplete design information or employers requirements';
- Where a JV is in place a JV related difference now has a one in three chance of driving a dispute (previously one in five);
- Two thirds of our respondents said that there was no sign of any increase in the use of collaborative practices to reduce the number of disputes; and
- The transportation sector had, by proportion, the most number of disputes.

These insights are reflective of the market features that can be seen in daily practice, but it is worth exploring in a little more detail some aspects and considering some of the themes.

US market spike

The US market dispute spike is perhaps symptomatic of the returning confidence and liquidity in the US economy combined with an ever increasing construction programme, which by proportion of more projects will have a relative effect on the number and size of disputes within that market. Some of the major public infrastructure clients employ some effective risk management and 'front end' dispute avoidance techniques which, when combined with active project controls have helped minimise the number of disputes.

All eyes on the contract administrator

The most common cause of dispute is now directly focusing on the contract administrator. In practice, however, it can be seen that it is not only employers but also contractors who fail to carry out their roles under the contract. Whilst there are always special condition modifications that are specific to each employer, there has not been any fundamental shift in contract forms or procurement strategies in the year to change the way that contracts should be administered. Therefore, it would appear that perhaps this has been caused by a number of market traits which combine to a greater or lesser degree as contributory causes, and are listed below:

- Project dynamics – fast pace construction, major programmes of work and multi-layering of contractors and subcontractors;
- People dynamics – A shortage of skilled manpower and professional expertise;
- Project documents – Poorly drafted documents with ambiguity and/or unclear obligations;
- Process – A failure to set and properly implement a rigorous and robust approach in following this with appropriate supporting training; and
- Globalisation – A mixing of culture, language and practice.

There is not one single mechanism that could be deployed to remove or prevent these global trends from impacting upon the effectiveness of the contract administrator, but there are a number of preventative strategies that could be deployed to minimise the risk and impact of such traits.

A full and thorough assessment of the procurement and contract strategy, along with a robust risk review can remove the propensity for an issue to present itself to the contract administrator. Getting the right people in the right role, giving them appropriate training, and having a systematic process and approach that gives a clear understanding of the specific contract machinery and administration requirements would also help.

There is also a continuing trend of employers and contractors alike failing to properly accept and embrace the cultural differences that exist. The global construction market is comprised of contractors who have a base typically in one region, but are working in all other regions around the world. It's not about changing culture, but embracing culture and collectively working to align working practices into the contractual machinery.

Joint Ventures – risk or reward?

The JV statistic is perhaps symptomatic of the globalisation of the market and increasing construction output. As a result, the number of JV's would increase by proportion, which could be as a result of employers divesting risk across a major programme of work, local licensing requirements and the desire to dissect and blend the specialist parts of particular contractors into one form of contract. This statistic highlights the need for some very careful focus around selection, set up and the management of the JV relationship. An interesting feature that is being seen in the global market is where common nation contractors who historically would have competed with one another when tendering, are now combining into pre-assembled consortia to jointly bid on major programmes. It remains to be seen if this will reduce the number of JV disputes.

Collaborative contracting does not appear to be a growing global trend, albeit there are pockets of practice where it is evident that this approach has positively contributed to a much broader range of success criteria being achieved and enhanced employer satisfaction. The transportation sector had the highest number of disputes by proportion, and it is no surprise given that a number of stimulus programmes that were implemented in various economies focused on the improvement of the infrastructure environment. This indicates that by proportion the transportation sector has had significant investment, and by its nature these programmes or projects are constructed in high risk and variable locations and constraints.

In summary there are many aspects that can be said to cause disputes, but we have settled this year on the theme that 'getting the basics right' can fundamentally contribute to the reduction in the number of issues encountered by the contract administration team (employer and contractor), and thereby promote the reduction in issues that are the seeds that grow to cause disputes.

Methodology

This research was conducted by Arcadis' Contract Solutions experts and is based on construction disputes handled by the teams during 2013.

About us

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 28,000 people active in over 70 countries that generate more than €3 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

Contract Solutions Expertise

Arcadis' Contract Solutions team helps clients avoid, mitigate and resolve disputes. The 160 strong 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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