

# GLOBAL CONSTRUCTION DISPUTES REPORT 2019

A photograph of a construction site at dusk or dawn. In the foreground, three construction workers wearing white hard hats and high-visibility vests are standing and talking. They are surrounded by stacks of wooden beams and other construction materials. In the background, a large building is under construction, with a tall crane visible against the sky. The overall scene is busy and industrial.

LAYING THE  
FOUNDATION FOR  
SUCCESS

# Laying the foundation for success

Globally, the average value of disputes in the construction and engineering sectors have decreased while the average length for resolution has slightly increased. This year's report recognizes the importance of early dispute avoidance techniques in seeking to decrease the volume of lengthy and costly disputes.

A key focus of the report is the requirement for effective risk management being used as a tool to maximize efforts in the avoidance of disputes. We hope through this and other early involvement techniques we can see average dispute values and resolution timelines decrease. In summary, this year's results provide a positive foundation for the industry which we hope it will continue to build upon in successfully avoiding disputes.



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# Introduction



**Roy Cooper, PE**  
*Head of Contract Solutions,  
North America*

Arcadis

Welcome to the Ninth Annual Arcadis Global Construction Disputes Report: *Laying the Foundation for Success*, which reveals key themes and insights into the global construction disputes market. Any dispute is case specific, so to endeavor to group causes and develop averages can risk omitting critical information related to the overall nature of the dispute. However, given our experience researching disputes over the past year, both globally and regionally, we are confident that our findings reflect the market trends.

Our research indicates that construction activity across the globe increased in 2018 for each of the sectors and activity will continue to remain strong. The industry will have larger construction programs of all types which will make it critical for project participants to understand the drivers of disputes.

This year's report highlights the average value of disputes dropped significantly from the 2018 report. The report also reveals the following:

- Regions that are utilizing early dispute avoidance techniques have been successful
- Human factors and misunderstanding of contractual obligations continue to be a primary cause of disputes
- Not all regions attempt to resolve disputes in the same way

Over the past nine years of gathering insights and capturing dispute trends, many of the leading causes of disputes have remained the same. This year's report explores how each region avoids, mitigates and resolves disputes. Although handled differently due to contrasting business practices and cultures, each region utilizes techniques that have proven to be successful.

With mega projects continuing to expand around the globe, contracts, plans and the projects themselves will be more complex, and more parties will be involved in the construction process. With more project participants, it is essential for those involved to understand the contract, their role in the project, and how to work with the team.



# Guest Foreword

As every year, Arcadis' Global Construction Disputes Report 2019 gives us food for thought. The number of disputes, compared to last year, remained the same. The length of dispute increased slightly overall, but significantly in the Middle East. As in past years, and perhaps not surprisingly, the most common causes of disputes continue to be the failure to understand or comply with contracts, poorly drafted contracts and inadequate project management and administration.

It would be tempting to look for solutions in ever more complex, more detailed contractual documents purporting to foresee every risk and address all possible issues. Experience shows, however, that such an approach is both unrealistic and in itself a source of disputes. Complexity and excessive detail all too often camouflage gaps and omissions and prove impossible for employers, engineers, project managers, contractors and sub-contractors to apply and administer. A contract should be, first and foremost, a document that speaks, clearly and fairly, to those actually involved in the project on a day-to-day basis.

But better contract drafting is not a panacea. No matter how well drafted and balanced a contract is, construction projects are inevitably complex and problems are bound to arise in their execution. It is at that point, that is, as soon as a risk arises, that potential disputes should be addressed and avoided. I would suggest that at least three building blocks are needed for successful dispute avoidance and resolution: (1) contractual mechanisms whereby risks are identified early and parties are obliged to consider how to address them; (2) appropriate training of staff on the specifics of the contract and ongoing specialist technical support, including legal support, throughout the execution of the contract; (3) a readily available contractual dispute avoidance mechanism in the form of a Dispute Avoidance Panel or a DAAB as under the 2017 FIDIC suite of contracts – although we can be more imaginative here, especially in terms of devising more cost-effective mechanisms for lower value projects.

In the end, we need a cultural change but this cannot be left only to goodwill. A new way of thinking about dispute avoidance should be embedded in appropriately drafted contracts and implemented in effective contract administration and support.

**Professor Renato Nazzini**  
*Centre of Construction Law and Dispute Resolution*  
**King's College London**

The overall value of disputes decreased in 2018, which indicates the industry is beginning to understand the importance of addressing the human factors. However, it is noteworthy that the new leading cause of disputes is *Owner/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations*, which emphasizes that there is still work to do.

Our report reveals that owners and project participants who are engaging in formal, contract-mandated avoidance, mitigation, and resolution techniques are reaping success. Methods now being used in several regions across the globe include:

- Risk Management
- Dispute Review Boards
- Mediation

Overall, we found that globally the construction industry is in fact learning the value of engaging in proactive dispute avoidance, mitigation and resolution techniques.

If you have any feedback or insight that you wish to share, please contact one of our regional leaders (see back cover).

# Risk Management and Trends across Regions

Risk management is essential to successful project management and delivery. Regulators, owners and the general public are increasingly expecting confidence and certainty in the design, delivery and operation of projects across the globe.

Projects fail because they are unable to adequately manage uncertainty and expectations. The plans are either too optimistic (i.e. the budget and schedule are based on the wrong assumptions), or external events and risks impact the plan's objectives, often giving rise to construction claims and disputes. Effective risk management aims to promote successful project delivery claims avoidance through the identification, assessment and response to these uncertainties.

Risk management is well established in certain industries, like transportation and oil and gas, and continues to grow in water/wastewater and resiliency sectors. For public projects with high visibility and political considerations, there is an intense amount of scrutiny on the cost and delivery dates of these projects.



**Transportation:** Risk management has been adopted by many transportation agencies across the globe for decades. Mega projects – such as new airport terminals, metro systems or freeways – and urban transportation network improvements are highly complex and interface with a large number of stakeholders. As they have such a direct impact on the traveling public and daily commuters, risk management is often emphasized to project the finish date of these projects, which can be of significant reputational importance to the transportation agency and politicians. To mitigate risks and delays, the project team may implement acceleration measures and cause inefficiencies that can give rise to future claims.

**Water/Wastewater:** Much of the European and North American wastewater systems were built over a century ago and can no longer cope with the demands of the much larger cities they now support. This has resulted in a large number of recent wastewater mega projects such as the Tideway Tunnel in London. These projects often coordinate with and use risk management lessons learned from transportation agencies.

**Climate Change and Resiliency:** Climate change is becoming one of the most important political topics with sea level rises and urban flooding, along with water shortages and drought frequently making national and international headlines. This has led to much larger environmental protection and resiliency projects, often funded from central governments who use risk assessments to give confidence in how and when their money will be spent.

**Oil and Gas:** In addition to focusing on profitability, multinational oil and gas corporations also have to consider other significant risks including accidents, safety, and dangerous environments. With the significant amount of upfront and operational cost in oil extraction, the industry uses risk management to predict whether a reserve is worth exploiting and for how long. Accidents and oil spills can have devastating environmental, safety and cost impacts. And, as easily accessible oil has already been tapped, extraction often takes place in hostile locations, subject to hurricanes in the Gulf of Mexico, political uncertainty in the Middle East or winter storms in Norway.

## Regional Risk Management Trends

### North America

- Unfamiliar with design-build contracts (both owner and contractor)
- Overheating contracting environment (especially in major cities)
- Complex stakeholder engagement
- “Buy America” price inflation/supply chain issues
- Funding uncertainty on federal projects
- Aging infrastructure and asset condition



### United Kingdom

- Supply chain capacity and management (materials & labor)
- Brexit and other political uncertainty affecting regulatory environment
- Government funding challenges due to wider fiscal pressures and market volatility
- Increased focus and scrutiny on opportunities and savings realization
- Infrastructure schemes from program planning to implementation
- Scope creep/design development
- Reputational risks associated with benefits demonstration to stakeholders



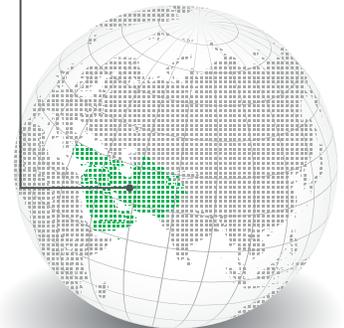
### Continental Europe

- High unemployment and “brain drain” of graduates and critical resources
- Brexit and other political uncertainty in major EU economies
- Increased focus on the environmental and social impact of projects
- Funding challenges due to wider fiscal pressures and market volatility



### Middle East

- Political confrontations/frictions between neighboring powers
- Availability of skilled resources
- Energy price uncertainty



# Overall Findings



The global average value of disputes was

**\$33**  
million (US)

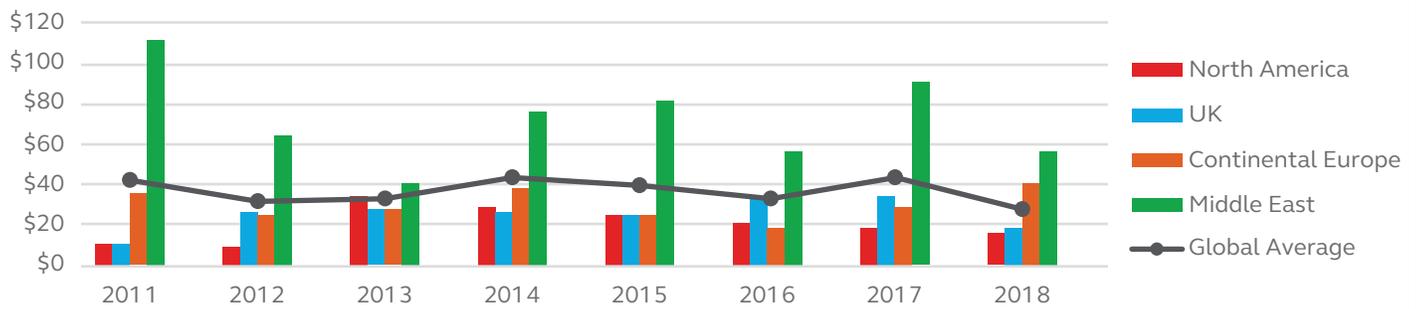
The global average length of disputes increased slightly to

**17**  
months

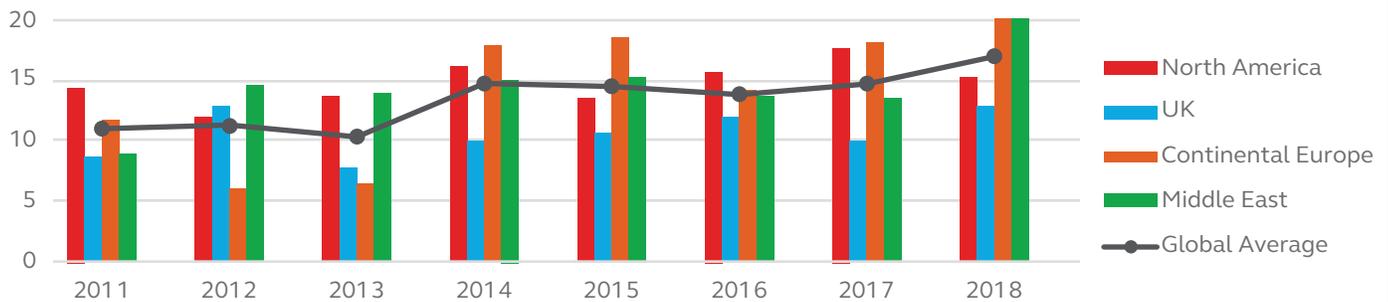
While the overall volume of disputes remained consistent with last year's results, the average value of disputes decreased, and the time taken to resolve these disputes rose in 2018. This, as indicated in the introduction, suggests the industry is beginning to better understand and address the impact of human factors in disputes, and more frequently utilize early dispute resolution techniques.

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.

### Average Dispute Values (US\$ millions)



### Average Length of Dispute (months)



REGION	AVERAGE DISPUTE VALUE (US\$ MILLIONS)					AVERAGE LENGTH OF DISPUTE (MONTHS)				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
North America	29.6	25	21	19	16.3	16.2	13.5	15.6	17.7	15.2
UK	27	25	34	34	17.9	10	10.7	12	10	12.8
Continental Europe	38.3	25	19	29.5	41	18	18.5	14.1	18.1	20
Middle East	76.7	82	56	91	56.7	15.1	15.2	13.7	13.5	20
<b>GLOBAL AVERAGE</b>	<b>42.9</b>	<b>39.3</b>	<b>32.5</b>	<b>43.4</b>	<b>33.0</b>	<b>14.8</b>	<b>14.5</b>	<b>13.9</b>	<b>14.8</b>	<b>17.0</b>



## PARTIES FAILING TO UNDERSTAND AND/OR COMPLY WITH CONTRACTUAL OBLIGATIONS has become the number one cause of construction disputes

2018 RANK	OVERALL DISPUTE CAUSE	2017 RANK
1	Owner/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations	3
2	Errors and/or omissions in the contract document	2
3	Failure to properly administer the contract	1

The highest value dispute handled by the team in 2018 was worth

\$2 billion (US)

*Owner/Contractor/Subcontractors' failure to understand and/or comply with contractual obligations* became the top cause of construction disputes for 2018, up from its spot as the third cause for the past two years. This emphasizes a continued need to bring on experienced industry advisors early in the process, and to work toward identifying the human factors that can lead to miscommunication or misunderstanding.

Globally, the buildings (education, healthcare, retail/commercial, government) sector saw the most disputes, a relatively new trend compared with previous years.



## THE MOST POPULAR METHODS for resolving disputes

2018 RANK	OVERALL MOST COMMON METHODS OF ALTERNATIVE DISPUTE RESOLUTION	2017 RANK
1	Party-to-party negotiation	1
2	Mediation	2
3	Adjudication	New in 2018

Overall, the team handled the same amount of construction disputes in 2018 as in the past two years and expect this volume will remain the same in 2019.

The most important activities in helping to avoid disputes were:

1. Contract-mandated early resolution forums such as mediation, disputes review boards, etc.
2. Owner/contractor willingness to compromise
3. Contractor transparency of cost data in support of claimed damages

Additionally, the most effective claims avoidance techniques were:

1. Risk management
2. Contract and specification reviews
3. Constructability reviews

Teams are beginning to utilize digital tools to manage risk and resolve disputes, with the following tools used by most of the regions:

- Building Information Modeling (BIM)
- Project Management Information Systems (PMIS)
- Digital Field Data Collection Systems

# North America

## OVERVIEW

The value of disputes in North America continued to drop in 2018, making it the fifth consecutive year the value of disputes dropped since a peak in 2013. However, the average time taken to resolve disputes in the region decreased slightly to 15.2 months. This is a reversal to last year's findings when on average the time taken to resolve disputes had increased. Overall, the volume of construction disputes stayed the same compared to last year. Even though the average value of disputes decreased, we are noticing there are still large construction programs ongoing in North America that are yielding larger dispute values.

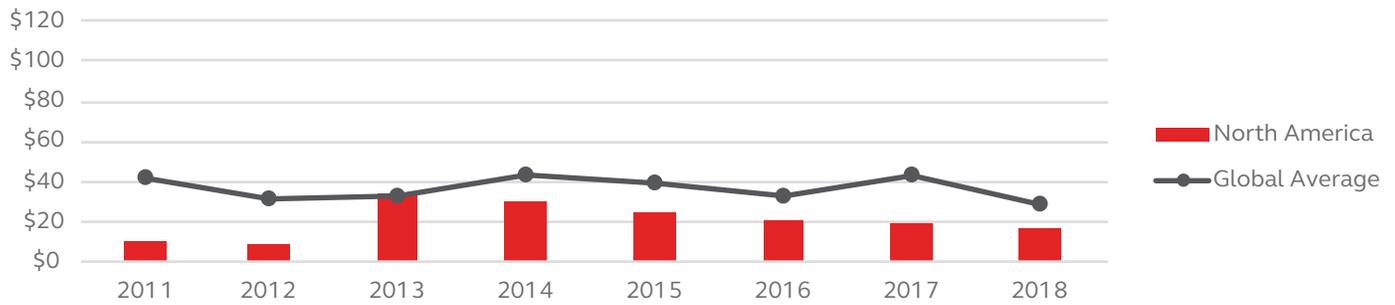
Our research in North America indicated in 2018 that the construction industry remained extremely busy, as the United States Department of Transportation made available more than \$63.5 billion in funds for major transportation infrastructure investments. There are several mega construction programs underway that top the \$10 billion mark. For example, the Port Authority of New York and New Jersey embarked on the Gateway Program, a rail expansion between New Jersey and New York with projected costs up to \$12.9 billion. On the West Coast, California High-Speed Rail is estimating construction costs at completion for their program to approach \$100 billion.

With infrastructure topping the list for disputes in last year's report, the building market moved into the top spot for 2018. Major building projects across the country are in full swing and projects such as New York City's Hudson Yards development and the Transbay Transit Center in San Francisco are well into construction. These are just a couple of examples of the building market in North America from East to West Coast.

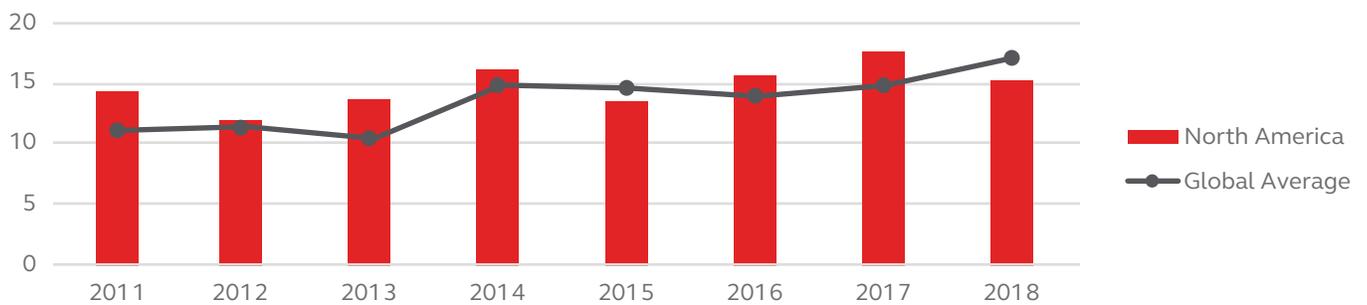
Some owners in the region have been employing more proactive measures upfront on their construction projects, and many contracts now require more sophisticated project controls methods. Knowing that change orders often create delays and inefficiencies which can lead to disputes, risk identification early in the construction process has been successful for many projects in North America. The resulting risk mitigation strategies have proven to reduce the likelihood that the construction project will end in a dispute. In North America, we have seen a trend toward utilizing risk management techniques and contract-mandated early dispute resolution forums. In addition, we have seen project participants beginning to realize that going to litigation is not a winning solution.



### Average Dispute Value (US\$ millions)



### Average Dispute Length (months)



	DISPUTE VALUE (US\$ MILLIONS)								LENGTH OF DISPUTE (MONTHS)							
	2011	2012	2013	2014	2015	2016	2017	2018	2011	2012	2013	2014	2015	2016	2017	2018
North America	10.5	9	34.3	29.6	25	21	19	16.3	14.4	11.9	13.7	16.2	13.5	15.6	17.7	15.2

2018 RANK	DISPUTE CAUSE	2017 RANK
1	Errors and/or omissions in the contract document	1
2	Owner/contractor/subcontractor failing to understand and/or comply with its contractual obligation	3
3	Poorly drafted or incomplete and unsubstantiated claims	New in 2018

2018 RANK	MOST COMMON METHODS OF ALTERNATIVE DISPUTE RESOLUTION	2017 RANK
1	Party-to-party negotiation	1
2	Mediation	2
3	Arbitration	3
4	Dispute adjudication board (tied with 3)	New in 2018

# North America

## DISPUTE CAUSES

For the fifth year running, the most common cause for disputes in North America was *errors and/or omissions in the contract documents*. For North America, more projects are using design-build and alternative project delivery methods. For these projects, the design process requires a more collaborative and interactive effort, which creates the need for all project participants to be diligent and responsive so that errors and/or omissions, along with delays, do not occur. Better communication and controls during the design process between all parties can be a powerful tool for minimizing the cost of errors and omissions.

*Owner/contractor/subcontractor failing to understand and/or comply with its contractual obligation* – the top cause globally – moved up from third to second position for North America. *Failure to properly administer the contract* had been one of the top three causes for the last few years for North America but did not appear in the top three this year.

The three most common methods of Alternative Dispute Resolution that were used during 2018 (the same as it has been the last two years) in North America were:

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

These results show that there continues to be a preference towards negotiated outcomes controlled by the parties involved in the dispute resolution process to avoid formal litigation proceedings. They are realizing that the further along a dispute progresses, the higher the value and cost of resolution will become. Expenses, like interest on the claim and the cost of litigation, can exceed the cost of the original claim itself. This demonstrates the value added when proactive dispute avoidance techniques are employed early in the construction process, which can aid in keeping participants away from formal claim proceedings altogether.

With so many large ongoing construction programs across all the sectors in North America, we expect to continue to see mega disputes. However, if sophisticated project participants continue to invest in early resolution techniques, we believe that the overall value of disputes will continue to decline.

## SOLUTIONS LOOKING FORWARD

Looking ahead, owners and contractors should continue to focus on improving and facilitating communication on their construction projects. When asked to choose the most effective claims avoidance technique for North America, survey respondents selected risk management. In addition, our research indicates that the most important factor in the early resolution of construction disputes was the owner and contractor's willingness to compromise. We are also finding that more project participants are actively using digital tools such as PMIS and BIM to aid in the prevention and resolution of disputes.

The construction industry has continued to evolve, and organizations have more opportunities than ever to effectively identify, manage, and mitigate their risk on projects. New risk management strategies, using new technology and techniques, are available to help owners and contractors handle construction risk differently and ultimately aid in avoiding construction disputes altogether.

With larger programs and multiple project delivery methods, it is essential that project participants have a strong understanding of contract obligations and risks and grasp their role in the process. For example, they need to understand that an owner's role in the design process is different on a design-build project than it is on a design-bid-build project, and act accordingly.

As previously mentioned, the center of any claim avoidance measure must be the consideration of the human factors and the fostering of healthy relationships between project stakeholders. Our industry always figures out a way to resolve every technical problem. After all, there are no half-built buildings and bridges. It is always a human factor that is a major component of any construction dispute.

“The high volume of construction activity in Southern California has resulted in significant cost increases throughout the region which presents major challenges for contractors engaged in lengthy, multi-year infrastructure projects. These cost impacts are being experienced by owners in the form of higher bid prices on new projects, but are also having impacts on existing on-going projects. For projects under construction that were priced prior to the current construction market, these pricing pressures are being manifested through an increase in the number of requests for change received from contractors, higher costs for those changes and less willingness to compromise. Within this environment, claims are foreseeable if owners and contractors are not actively seeking to resolve disputes. It is therefore increasingly important that contractors and owners maintain open communication, share risk when possible and be willing to accept compromise in an effort to mitigate conflict.

For owners, compromise and risk sharing may include a recognition that their contract documents are not always as thorough as they may believe them to be, with the acceptance of responsibility where grey areas exist. Owners may also mitigate unforeseeable cost increases by exercising escalation or similar provisions of their contracts. For contractors, compromise may include a willingness to apportion responsibility rather than taking an all-or-nothing position. As the Arcadis' report findings conclude, contractors and owners are best served when formal disputes are avoided by the parties acting in good faith by maintaining open communication with a willingness to compromise in the best interest of the project. When disputes do arise, project participants should be driven to address all or portions that are resolvable as early as possible. As is often said, unlike fine wine, disputes do not get better or less expensive with age.”

**GARY H. BAKER, PE**

Project Executive – Los Angeles Metro (US)

# United Kingdom

## OVERVIEW

The average value of construction disputes in the UK decreased by 47% to \$17.9 million during 2018, continuing to demonstrate the UK remains under the global average. This is a significant decrease compared to the average values of the previous six years, particularly given the continuing impacts of Carillion's liquidation and the Grenfell Tower tragedy. It is only the second time our findings experienced an average dispute value below \$20 million.

During 2018, the average length of time taken to resolve disputes in the UK has increased to almost 13 months, up approximately 28% from 2017. This is consistent with the global trend experienced for 2018 which highlighted that disputes are taking longer on average to resolve. Positively, the UK remains the jurisdiction with the shortest average length of time to resolve a dispute.

The method of *party-to-party negotiation* re-emerged as the most commonly used dispute resolution method. *Mediation* continues to rank third in the UK. As we predicted in last year's report, our survey respondents have seen a reduction in the use of adjudication (contract or ad hoc) in the UK to resolve disputes during 2018.

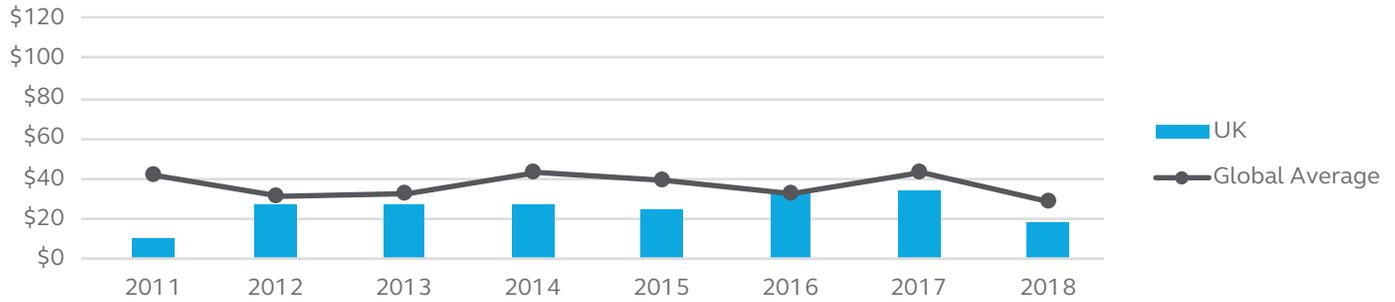
We suggest this may be an impact of the confirmation received in the Court of Appeal decision in *S&T (UK) Ltd v Grove Developments Ltd* [2018] EWCA Civ 2448, reducing the use of 'Smash 'n' Grab' adjudications. It could also stem from dissatisfaction with the ever-escalating cost of the adjudication process and a tendency for significant extensions to the prescribed 28-day statutory period for a decision.

The UK continues to experience most disputes being resolved after they have crystallized; rather than parties seeking to avoid or mitigate a potential dispute situation. While it is extremely encouraging that parties are using negotiation as the preferred method to resolve their disputes; it appears these are occurring at a stage in the dispute cycle when the most effort, cost and time are typically required.

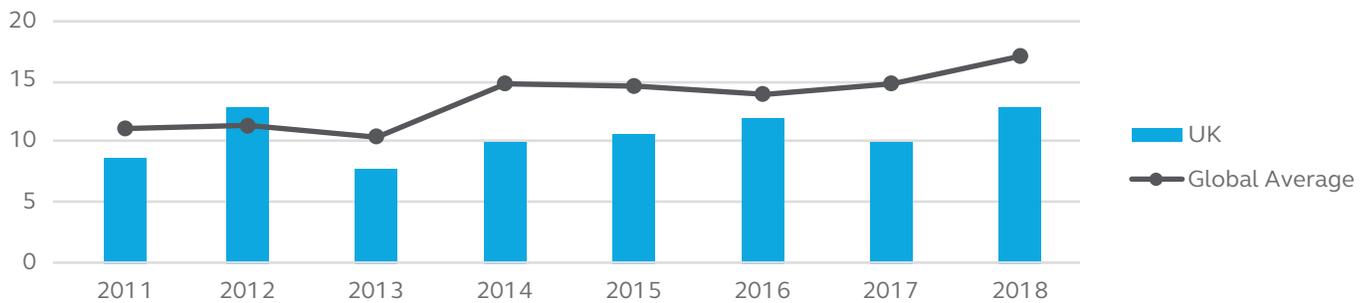
In terms of the most important factor in the mitigation or early resolution of disputes, contract mandated early resolution formats (DAB's/mediations) did not appear highly in our survey results. Our respondents determined the number one factor as a *willingness to compromise in the dispute would lead to mitigation or early resolution of the dispute*. This appears to suggest that enforced implementation of early forms of dispute resolution is simply not enough and a focus on party conduct or attitudes could help to improve early avoidance or mitigation of disputes.



### Average Dispute Value (US\$ millions)



### Average Dispute Length (months)



	DISPUTE VALUE (US\$ MILLIONS)								LENGTH OF DISPUTE (MONTHS)							
	2011	2012	2013	2014	2015	2016	2017	2018	2011	2012	2013	2014	2015	2016	2017	2018
United Kingdom	10.2	27	27.9	27	25	34	34	17.9	8.7	12.9	7.9	10	10.7	12	10	12.8

2018 RANK	DISPUTE CAUSE	2017 RANK
1	A failure to properly administer the contract	1
2	Employer/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations	2
3	Failure to serve the appropriate notice under the contract	3

2018 RANK	MOST COMMON METHODS OF ALTERNATIVE DISPUTE RESOLUTION	2017 RANK
1	Party-to-party negotiation	2
2	Adjudication (contract or ad hoc)	1
3	Mediation	3

# United Kingdom

## DISPUTE CAUSES

The rankings of the top three dispute causes for the UK remains as listed in 2017. It is a worrying trend for the UK construction industry that a *failure to properly administer the contract* continues the previous four years' findings as the number one cause of disputes in the UK.

Delving deeper into potential rationale for these findings, the role of the contract administrator becomes prominent. The Project Manager (PM) and Engineer's conduct was determined to be at the heart of how disputes crystallize over 75% of the time.

When the PM or Engineer is the material influence in the dispute, the most common cause experienced is a *lack of understanding of the procedural aspects of the contract*. Unsurprisingly, almost two-thirds of the survey respondents stated proper contract administration would have had the single largest impact in avoiding the disputes they were involved in.

A further sign of concern for the UK construction industry is the continued occurrence of the second most common dispute cause *Employer/Contractor/Subcontractor failing to understand and/or comply with its contractual obligations*.

Do our results suggest construction contracts are too complex for the parties and administrators to understand, or simply that parties still adhere to historic traits rather than embracing new ideologies? With new standard form contracts including JCT, NEC and FAC-1 being recently released, could this provide an opportunity for improvement in this area?

While the dispute causes show concerning trends, it is encouraging that the most common period where resolution of disputes occurred is settlement prior to proceedings. Supported by the findings that *party-to-party negotiation* is the number one method of resolving disputes this shows a promising attitude by parties in the UK.

Our survey results show the key element in determining whether the outcome of a dispute was a success for the participants involved is balancing the cost of resolution against the value of the outcome. Positively, parties appear to be considering the impacts of the dispute resolution processes against the time, commercial and relationship aspects of their projects.

## SOLUTIONS LOOKING FORWARD

The shadow of uncertainty caused by Brexit continues in the UK with no forthcoming decision on whether the UK will leave the European Union with a deal, or at all. Consequently, the UK has seen delayed investment decisions resulting in fewer new projects; particularly in the private commercial sector.

Projects including High Speed 2 (HS2) and the Birmingham 2022 Commonwealth Games Village are still forecasted to start in 2019. However, the expected overall UK construction industry trend is a continued slowdown in the growth which has been experienced since mid-2018 (ONS).

We anticipate this will see contractors experience periods working below capacity and with increased competition for new works. As a result, commercial decisions are likely to be taken which may lead to potential disputes where differences arise. We recommend as a matter of good practice both employers, contractors and the supply chain implement collaborative long-term focused planning and relationship building seeking to avoid or mitigate any disputes which may arise.

The UK construction industry is continuing its transition into a digital age through the use of BIM and 4D/5D/6D Modeling. This is a good example of an effective risk allocation tool that could be implemented early in the process, allowing multi-party engagement for a collaborative resolution to difficulties which may arise.

In 2018, the Court of Appeal clarified the prevention principle confirming that party agreed exclusions will be upheld in relation to concurrent delay in *North Midland Building Ltd v Cyden Homes Ltd* [2018] EWCA Civ 1744. While the decision may be welcomed by employers seeking to include concurrent delay exclusions within their contracts, we expect contractors to continue to raise concurrent delay issues and expect disputes to continue to arise on this topic.

Finally, we predict the role of the Contract Administrator (or PM or Engineer) will continue to be in the spotlight during 2019. The trends experienced in our survey do not show any signs of this changing in the immediate future. We advocate the implementation of better training for those administering contracts in the UK construction industry in an effort to improve the avoidance of disputes arising.

In summary, the UK continues to be one of the leading jurisdictions for the resolution of disputes with low dispute values and quick resolution times, in comparison to the global averages. We hope to see the UK continue leading the way by encouraging parties to make use of effective avoidance and mitigation strategies for their disputes.

“ It is unsurprising that the average value of construction disputes has decreased, as we see a move away from having large final account disputes at the end of a project. Parties are now generally preferring to try to resolve disputes as they arise contemporaneously during a project and/or to split disputes into more manageable bite sized chunks. It is not a sign, unfortunately, that the UK construction industry is becoming any less contentious. The drive to resolve disputes earlier is being supported by the drafters of the standard form contracts. Many of these contracts now contain elaborate provisions to ensure the early notification of claims and regimes that facilitate early discussion of them between the contracting parties. They also support rapid recourse to a third party neutral if their intervention is required. It is likely to be for this reason that the Arcadis report sees a reduction in the use of adjudications and an increase in negotiation as the preferred method of dispute resolution. As the report shows, however, this does mean that when claims cannot be resolved at an early stage, they end up being disputes that often then take longer to resolve. Parties become more entrenched and want to see a return on the investment that they have made in the proceedings. Given that many of the new editions of the standard form contracts are now considerably longer than their predecessors, it is concerning – but not surprising – that the report shows that a “failure to properly administer the contract” remains the primary cause of disputes. With margins continuing to be squeezed, and a perception that many tenders are still decided on the lowest price basis, it is difficult to see how this cause will be eradicated any time soon. While the fact that the report shows that the UK is one of the leading jurisdictions for dispute resolution should be applauded, there is still clearly work to be done. There is scope for quicker, cheaper and more bespoke forms of dispute resolution, supported by more collaborative behavior, fairer risk sharing and a better understanding of how contracts are intended to be operated.”

**ADRIAN BELL**

Partner – CMS Cameron McKenna Nabarro Olswang LLP (UK)

# Continental Europe

## OVERVIEW

Overall, the construction industry is performing quite well in many European countries. For example, in France and Germany there is strong private investment in the real estate and industry sectors. Public entities still maintain important investment in infrastructure projects, such as the Grand Paris Project, which remains a shining example of public investment.

However, construction costs - notably materials and labor costs - are increasing across Europe ([Arcadis International Construction Cost 2019](#)), which directly affects projects that are already ongoing.

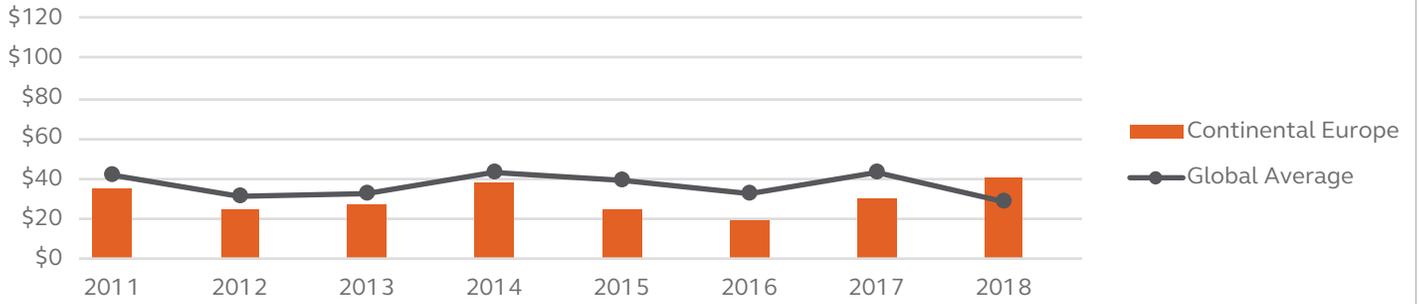
Moreover, and probably as a result of construction market increasing demand, owners and contractors are sometimes experiencing difficulties to sufficiently staff projects.

In this context, in 2018, the Continental Europe region saw another increase in the average value of disputes at \$41 million, the highest average value for the region since 2011. This year follows the trend of 2017, with Continental Europe's average value at the second highest among the regions, after the Middle East, illustrating increasing project amounts. However, this number could be partly driven by this year's most costly dispute from our survey results, which at \$600 million is much larger than last year's largest dispute of \$180 million.

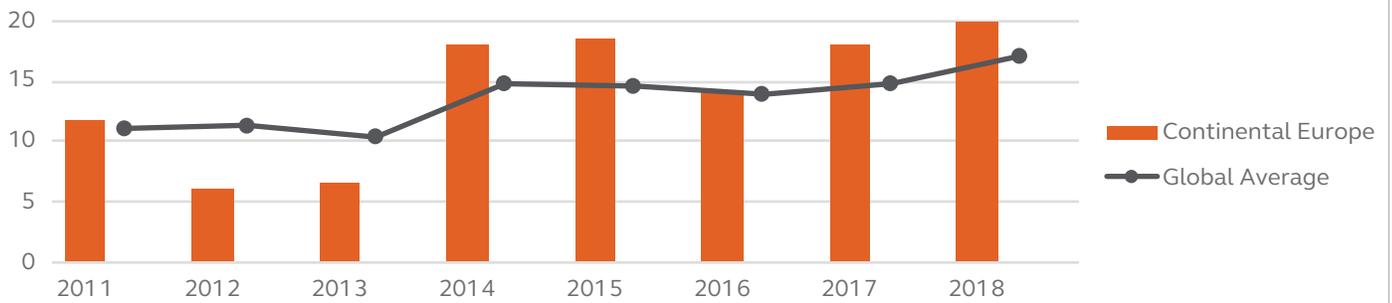
While the average volume of disputes has remained the same, the average time taken to resolve disputes increased to 20 months this year. Though this year's report highlights growing efforts in early dispute resolution methods, such as *an increased use of mediation or dispute boards*, Continental Europe remains the region with the longest dispute duration. This confirms a clear trend over the past few years regarding the region's difficulty to solve disputes in a timely manner.



### Average Dispute Value (US\$ millions)



### Average Dispute Length (months)



	DISPUTE VALUE (US\$ MILLIONS)								LENGTH OF DISPUTE (MONTHS)							
	2011	2012	2013	2014	2015	2016	2017	2018	2011	2012	2013	2014	2015	2016	2017	2018
Continental Europe	35.1	25	27.5	38.3	25	19	29.5	41	11.7	6	6.5	18	18.5	14.1	18.1	20

2018 RANK	DISPUTE CAUSE	2017 RANK
1	Differing site conditions	New in 2018
2	Third-party or force majeure events	New in 2018
3	A failure to properly administer the contract	2

2018 RANK	MOST COMMON METHODS OF ALTERNATIVE DISPUTE RESOLUTION	2017 RANK
1	Party-to-party negotiation	1
2	Mediation	New in 2018
3	Expert Determination	2

# Continental Europe

## DISPUTE CAUSES

Last year's report highlighted professionals' increasing involvement in dispute avoidance as part of the risk management system. This year's findings confirm further increasing efforts, starting at earlier stages and ongoing during the project in order to improve the contract, project controls and risk management system.

Not surprisingly, due to these increasing efforts, a *failure to properly administer the contract* dropped from the second slot in 2017 – and the first slot in 2016 and many other years – to third this year, indicating the region is steadily improving in this area.

The leading cause of disputes in Continental Europe this year was *differing site conditions*, followed by *third-party or force majeure events*, neither of which topped the list in recent years, which is a surprise and may indicate a drop in technical and constructability review of projects compared to the improving efforts in other dispute avoidance techniques.

The three most common methods of alternative dispute resolution in 2018 changed slightly from previous years with the addition of *mediation* over *arbitration*, as predicted by the region in last year's report:

1. Party-to-party negotiation
2. Mediation
3. Expert determination

*Party-to-party negotiation* remains the leading method to solving disputes. *Mediation* tops the list at second rank for the first time, as a result of professionals' and institutions' increasing involvement in its promotion. This may be a good sign of stakeholders' willingness to use new techniques to solve disputes faster than *party-to-party negotiation*.

Surprisingly not listed in this year's top three most common methods of alternative dispute resolution is *arbitration*, which remains strong with continuous growth in Continental Europe, notably in Paris.

## SOLUTIONS LOOKING FORWARD

Looking ahead, our findings are similar to last year. On one hand, owners and contractors should continue to focus on spending additional efforts at early stages. Indeed, respondents overwhelmingly (63.6%) chose risk management as the most effective claims avoidance technique. Moreover, the importance of contract mandated early resolution forums such as *mediation*, *disputes review boards*, etc. ranked in third position of factors influencing an early resolution of disputes.

On the other hand, and even if contract administration seems to have already improved as detailed above, owners and contractors should keep continuous efforts in contract management during the project, as proper contract administration has been proven to have the single largest impact in avoiding disputes.

Moreover, accurate and timely schedules and reviews by project staff or third parties are listed as the second most important factors in the early resolution of disputes. As delay analysis becomes more well-known and used, it indicates an increasing awareness of the importance of managing schedules and of assessing delays and responsibilities in all dispute resolution methods.

To conclude, there is no doubt there is increasing investment in dispute avoidance and resolution techniques, with an increased use of digital tools in this discipline. However, there is, while remaining steady, no sign of a decrease in the volume of disputes.

Moreover, no one should forget about the critical importance of human factors, especially given Continental Europe's cultural approach. Indeed, *party-to-party negotiation* has again been listed as the first dispute resolution method, and the most important factor in the mitigation/early resolution of disputes encountered in 2018 was the *owner/contractor's willingness to compromise*.

In Continental Europe's specific market, the upcoming years will be critical in assessing the impact increasing professionalization of dispute avoidance and resolution techniques have on disputes.

“Is it such a surprise to see *differing site conditions* topping this year’s list of the most common causes of disputes in Continental Europe?”

We have certainly seen, for quite some time, an increase in the number of disputes relating to site and geotechnical conditions particularly in those Central and Eastern European countries that joined the EU in 2004 and 2007. A number of those countries have indeed rushed to launch new tenders due to a significant risk of losing EU funds available to them for specific eligibility periods and this was done without the necessary level of project preparation including adequate feasibility studies highlighting potential geotechnical risks. This has in turn led to disputes relating to the risk of site and geotechnical conditions which some employers have recently sought to address by transferring so far as they could that risk to contractors resulting in EPC-style contracts even in respect of underground works. Has this transfer of risk reduced the number of disputes? Not really, and one can hope that employers will now consider new models of risk allocation for works which contain a significant geotechnical uncertainty. The FIDIC Emerald Book - First Edition of the “Conditions of Contract for Underground Works” - which was launched in May 2019, is in this regard an interesting development.

Another interesting development is the increasing use of dispute avoidance mechanisms, such as dispute boards, on large infrastructure projects. One good example is the Grand Paris Project which is mentioned in the Arcadis report and which is currently the largest infrastructure project in Europe (with 200 km of new metro lines and 68 stations, for a cost in excess of €32.5 billion). Some of the contracts recently awarded on that project include provisions for standing dispute review boards, a new feature in public works projects in France. Let’s watch this space and see whether dispute boards will feature in next year’s issue of the Arcadis Report.”

**FRÉDÉRIC GILLION**  
Partner – Pinsent Masons (France)

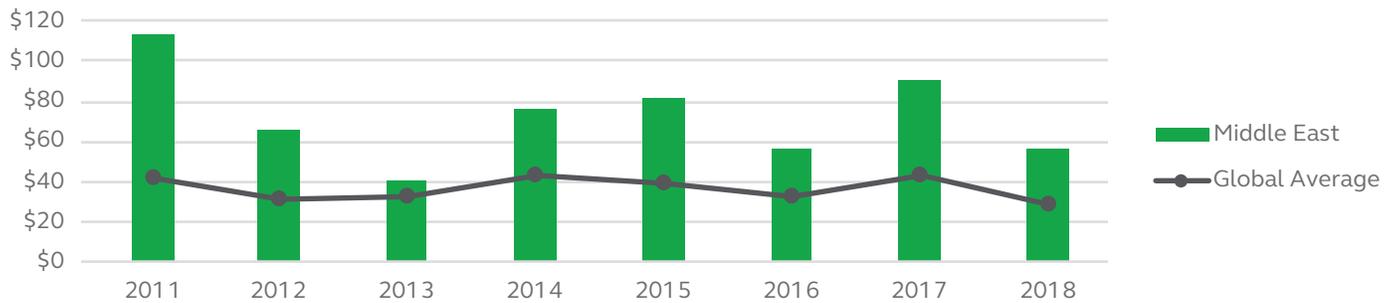
# Middle East

## OVERVIEW

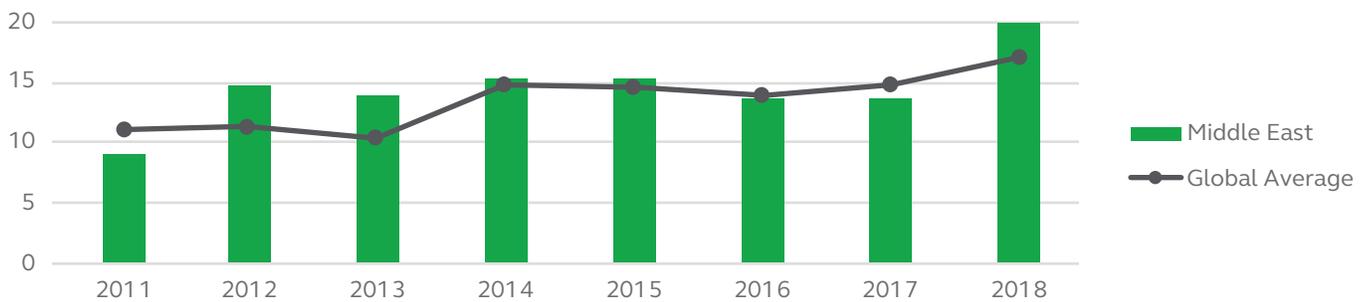
Last year, the average value of disputes in the Middle East dropped to \$57 million in 2018 from \$91 million in 2017. This is likely due to disputes trickling down the supply chain, involving suppliers and subcontractors, with typically lower dispute values. It is also selective of the value of projects that have been awarded in recent years, which ranged from mid- to large-size. Although the total volume of construction disputes is about the same as 2017, the average length of time needed to resolve a dispute has increased to 20 months, compared to 13.5 months in 2017. This increase is likely attributed to the low liquidity in the construction market, which encourages the liable parties in the dispute to postpone the timing of having to pay out the disputed amount by prolonging the dispute cycle as much as possible. The building market (which includes education, healthcare and real estate development) has topped the list for disputes for 2018.



### Average Dispute Value (US\$ millions)



### Average Dispute Length (months)



	DISPUTE VALUE (US\$ MILLIONS)								LENGTH OF DISPUTE (MONTHS)							
	2011	2012	2013	2014	2015	2016	2017	2018	2011	2012	2013	2014	2015	2016	2017	2018
Middle East	112.5	65	40.9	76.7	82	56	91	56.7	9	14.6	13.9	15.1	15.2	13.7	13.5	20

2018 RANK	DISPUTE CAUSE	2017 RANK
1	Poorly drafted or incomplete and unsubstantiated claims	New in 2018
2	A failure to properly administer the contract	2
3	Owner/contractor/subcontractor failing to understand and/or comply with its contractual obligations	New in 2018

2018 RANK	MOST COMMON METHODS OF ALTERNATIVE DISPUTE RESOLUTION	2017 RANK
1	Party-to-party negotiation	1
2	Arbitration	2
3	Mediation	New in 2018

# Middle East

## DISPUTE CAUSES

*Poorly drafted or incomplete and unsubstantiated claims* is the top cause for disputes this year, despite it being absent from the top three reasons for disputes last year. This is likely to mean that the party receiving the claim, whether an employer, contractor, subcontractor or supplier, will not go through the burden of considering a claim that is not narrated and substantiated up to a professional standard. This seems to be the case regardless of whether the party receiving the claim believes the other party has even a partial entitlement to the claim. This is likely due to the current financial and economic climate globally and in the Middle East in particular, which similar to the previous year, places much more emphasis on the claiming party to take on the role of providing the burden of proof rather than expecting the other party to fill in the gaps in the claim document. This doesn't come as a surprise, especially when a *failure to properly administer the contract*, which forms the backbone of a construction claim's substantiation, and *owner/contractor/subcontractor failing to understand and/or comply with its contractual obligations*, hold second and third place as the causes for disputes in 2018.

Surprisingly, last year's causes, which were related to employer's responsibility, such as *failure to make interim awards on extensions of time and compensation* as well as *owner directed changes*, are no longer the top three causes this year.

The most common methods of Alternative Dispute Resolution used in the Middle East in 2018 changed slightly from 2017 with *mediation* replacing *dispute adjudication Boards* in third place while *party-to-party negotiation* remained as the leading method followed by *arbitration*.

## SOLUTIONS LOOKING FORWARD

Moving forward, it seems that it will become more important than ever for claimants in a dispute to understand that it is unlikely that they will receive what they believe they are entitled to unless they have furnished their client with a claim that narrates a complete, logical and succinct story. If the claim submission is not substantiated by solid evidence, the latter of which flows naturally from a best practice contract administration process, the claimant will walk away with a less-than-expected settlement.

However, despite this emphasis on the heartless aspects of facts, logic and evidence, the importance of the human factor and emotional intelligence in disputes and how to interact with the team members whether internally within a party or with the opposing party cannot be understated. As Dale Carnegie, an American writer and developer of famous courses in self-improvement and interpersonal skills once said, "When dealing with people, remember you are not dealing with creatures of logic, but creatures of emotion."

With so many large and complex ongoing construction programs across many sectors in the Middle East combined with the current financial and economic climate, perhaps it is time for the parties within the construction supply chain to engage in open discussions on a case-by-case basis with the specialists in the contract administration and claims disciplines. By doing this, they can devise together bespoke and cost-effective solutions and services to improve these matters from all aspects.

“ In our commentary last year, we observed it was ‘business as usual’ in terms of the type and size of disputes across the Middle East. That is equally true of 2019. We continue to see a steady stream of more modest size disputes, the value of which reflects the general mid- to large-size projects that have been awarded in recent years. Although relatively lower in value, these disputes are crystallizing and advanced earlier than they would have historically, resulting in a more ‘current’ portfolio of disputes. Recent larger disputes have tended to originate in KSA, Qatar and from within Iraq.

Following the demise of Carillion in the UK, and the contribution of Middle East debt to that collapse, we expected to see Contractors taking action in relation to the:

- Recovery of legacy ‘tail end’ debt (particularly unpaid retentions), and
- Better management of ‘current’ levels of debt.

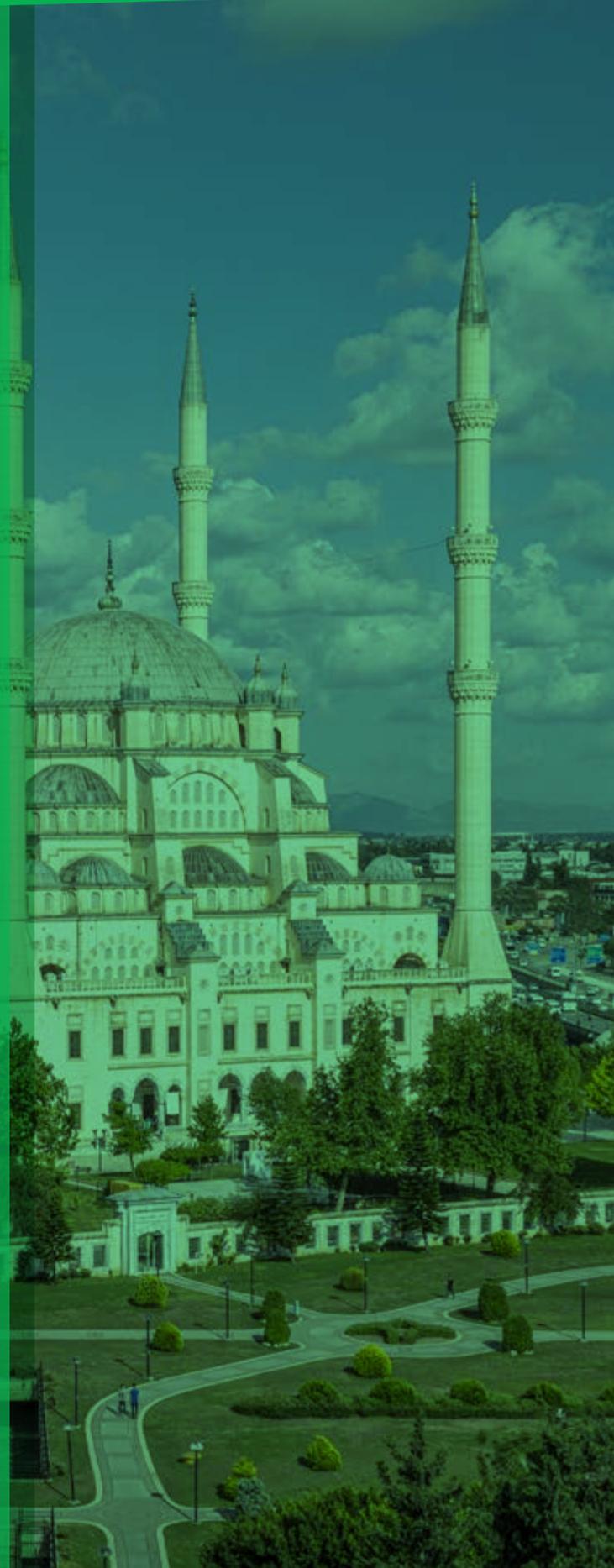
The portfolio of claims that we have seen over the last year appears to be a response to the latter. That is a healthy development; however, the increase in the former has not been as noticeable as we had anticipated. Whatever the reasons, unless action is taken in relation to claims relating to projects that were concluded (or terminated) after the Global Financial Crisis, they will shortly be at risk of being statute barred.

While arbitration remains the primary choice for dispute resolution across the Middle East, greater care and attention still needs to be taken to ensure that well-drafted Arbitration Agreements are incorporated into contracts so as to avoid challenges to jurisdiction and cases being referred to the local courts as a result.

Overall, claims management appears to have been tighter over the last year with a willingness to escalate matters to a formal dispute more quickly than in recent years. ”

**MARK BLANKSBY**

Partner, Projects & Construction – Clyde & Co. (UAE)



# Methodology

This research was conducted by the Arcadis Contract Solutions team and is based on global construction disputes handled by the team in 2018, as well as contributions from industry experts. Due to limited responses, input from Asia and South America were not included in the 2019 global report.

A special thank you to those that provided responses to the survey. For each survey response, Arcadis made a donation to **Water For People**. Arcadis has been a long-time partner of Water For People, an international nonprofit working across nine countries to bring safe water and sanitation to millions of people.



water for people



# About Arcadis



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 \$3.5 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

The 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 pools of procurement, contract and risk management, as well as quantum, delay, project management, engineering defects and building surveying experts.

Our experts provide dispute avoidance and management strategies expertise, including 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.





# Contract Solutions



**Roy Cooper**  
Head of Contract Solutions,  
North America  
T: +1 860 503 1500  
E: roy.cooper@arcadis.com



**Shawkat Abbas**  
Head of Quantum,  
Middle East  
T: +971 56 984 5391  
E: shawkat.elabbas@arcadis.com



**Gary Kitt**  
Head of Contract Solutions,  
United Kingdom  
T: +44 20 7812 2310  
E: gary.kitt@arcadis.com



**Jordi Recan**  
Head of Contract Solutions,  
Continental Europe  
T: +33 (0)1 40 74 36 10  
E: jordi.recan@arcadis.com



**Mario Torres**  
Head of Contract Solutions,  
Germany and Central Europe  
T: +49 15 202 7641 04  
E: mario.torres@arcadis.com

