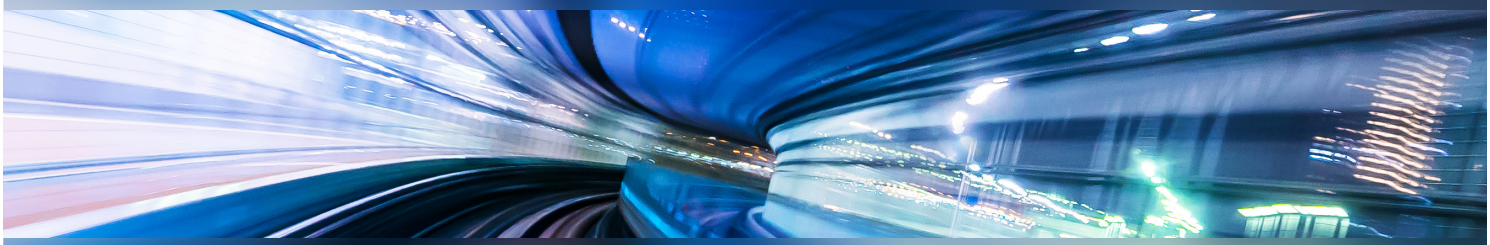
CLIFFORD
CHANCE



INFRASTRUCTURE:
21ST CENTURY CHALLENGES
A LEGAL PERSPECTIVE

INTRODUCTION

Global geopolitical shifts, climate change, financial stress, and rapid technological developments are having a huge impact on the infrastructure sector.

In this publication we provide a legal perspective on some of the most pressing issues for the industry, with features covering topics that between them touch on all aspects of the infrastructure lifecycle.

Michael Bates
Regional Managing Partner, UK

Clifford Chance's infrastructure group is a recognised market leader, consistently ranked at the top of the global infrastructure league tables and directories.

Our global team of multi-disciplinary, highly experienced lawyers are known for delivering practical and innovative solutions to clients, covering every stage in the infrastructure value chain from fund formation to the structuring and financing of projects through to the ongoing operations, including dispute resolution, investor exit routes, mergers and acquisitions.

8

Consecutive Years

European Infrastructure Law Firm of the Year 2017, 2016, 2015, 2014, 2013, 2012, 2011 and 2010

PEI Infrastructure Investor – Annual Awards for Excellence

PEI Alternative Insight
INFRASTRUCTURE INVESTOR

#1 in 2017

- Global League Tables by volume/value
- EMEA League Tables by volume/value
- LATAM/Caribbean League Tables by volume/value
- Asia (exc ANZAC) League Tables by volume/value
- PPP League Tables by volume/value
- Renewables League Tables by value

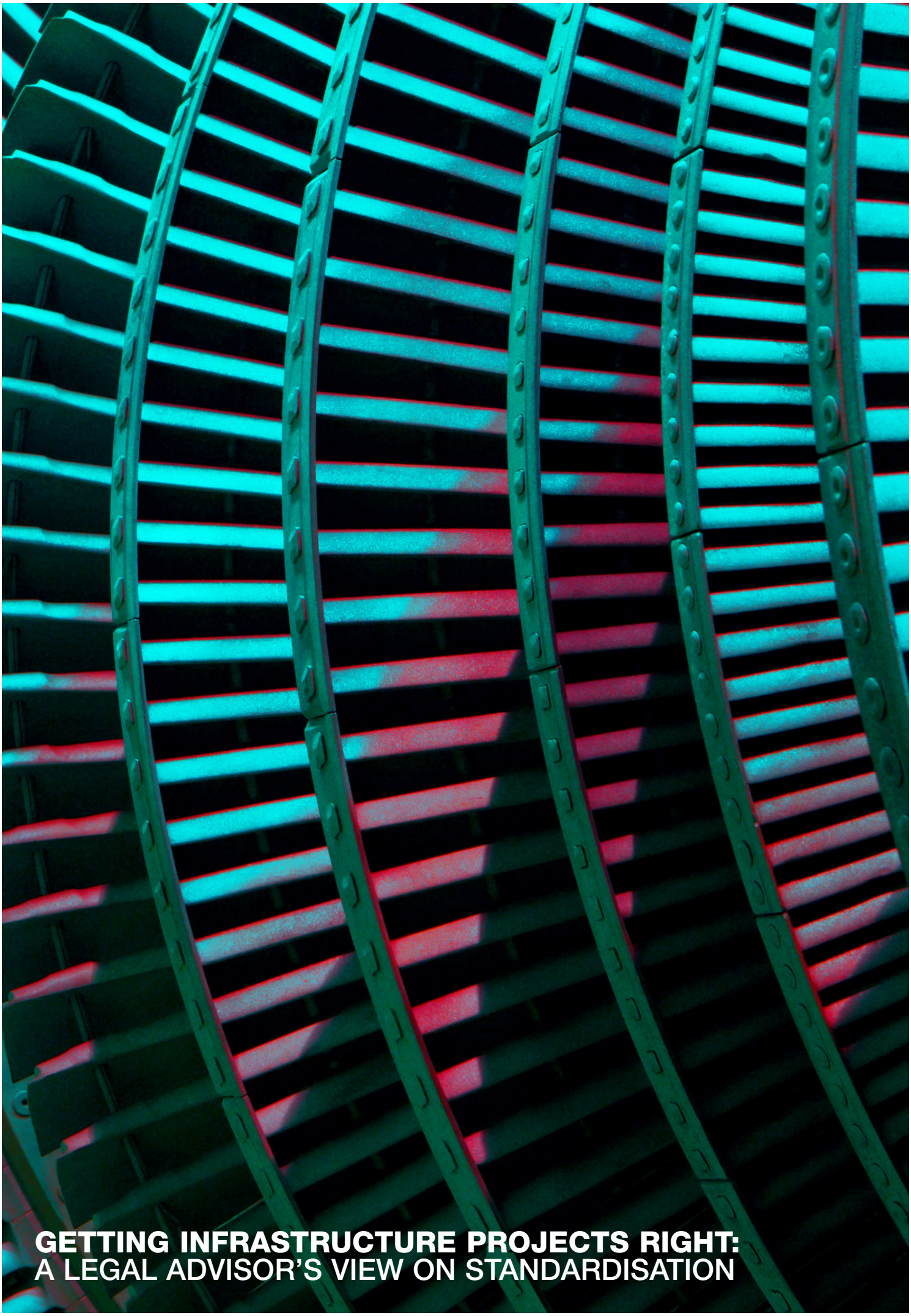
Inframation
An Acuris company

#1 in 2017

- European Upstream Oil & Gas: Chrysaor North Sea
- European Refinancing: National Grid Gas
- European Offshore Wind: Walney Extension
- European Social Infrastructure: Ikitelli Hospital
- European Power: Calvin Capital • European Transport: Empark

IJGlobal
Project Finance & Infrastructure Journal

CONTENTS



GETTING INFRASTRUCTURE PROJECTS RIGHT:
A LEGAL ADVISOR'S VIEW ON STANDARDISATION

GETTING INFRASTRUCTURE PROJECTS RIGHT:
A LEGAL ADVISOR'S VIEW ON STANDARDISATION

To promote wider adoption of document and process standardisation in the infrastructure industry, public- and private-sector organisations should foster greater collaboration during the early stages of project development. In this article, first published in McKinsey's *Voices on Infrastructure* (Oct 2018), Clifford Chance experts give their insights into how standardisation can benefit infrastructure project development.

Governments, multilateral agencies, development finance institutions, and the private sector have made substantial efforts to improve the process of infrastructure projects from the predevelopment stage through implementation. These efforts include the creation of standardised infrastructure project frameworks—with guidance on key process stages (such as procurement) and risk allocation, as well as standard form documentation. Realistically, every infrastructure project is unique, and there are elements of each—for example, cost sharing or capital expenditure terms—that will always be project-specific. Yet the use of standardised tools where feasible can significantly reduce project development timescales and bring transparency into procurement and contracting processes for host governments and procuring bodies.

Despite such efforts to date, project development too often continues to be reactive rather than well planned, prioritised, and efficiently executed. To reap the full benefits of standardisation, public- and private-sector participants must work together in a more meaningful way. By making better use of standard models, promoting knowledge sharing, and investing more in the predevelopment stage, infrastructure projects can proceed much more efficiently.

Barriers to standardisation

Significant investments have been made in developing standardised frameworks, model contracts, and guidance. While the infrastructure sector would be well served by maximising the use of these tools, several barriers currently stand in the way:

- **Existing frameworks, model contracts, and guidance are often overlooked in the development of new infrastructure.** Instead, stakeholders make assumptions about what private-sector developers or lenders will accept and then enshrine such suppositions into frameworks or legislation. Understanding the best way to use existing resources in a specific context requires experience, and individual jurisdictions and government agencies without that experience often opt to create their own models.
- **Guidance on risk allocation published by international organisations is not necessarily accepted by investors, contractors, governments, or lenders.** Numerous international organisations—the Organisation for Economic Co-operation and Development, the International Institute for Sustainable Development, the United Nations Economic and Social Commission for Asia and the

Pacific, and many others—have published guidance on allocating risks when developing projects. Perhaps due in part to the proliferation of guidance, no industry or market consensus has emerged on which organisations should be the leading voice (or voices). The sector also exhibits a degree of scepticism regarding the extent to which risk frameworks on infrastructure projects can be standardised, so the prevailing tendency is to treat each project as bespoke.

- **Even when stakeholders heed general guidance and use model contracts, adapting them to a specific deal can be a challenge.** With a cross-sector or generic standardised contract, for example, the provisions are often based on assumptions about the underlying project (for instance, that it includes both construction and services components) that are not always applicable. In addition, parties will often plead special circumstances on a particular transaction to justify departures from standard terms. The potential efficiencies of using a standard form can easily be squandered if parties are not well advised on what modifications are genuinely necessary. Standardised documentation does not eliminate the need for properly experienced and empowered negotiating teams.

Toward a more collaborative approach

Developing and using standardised models comes with inherent challenges. Nevertheless, infrastructure leaders have no choice but to embrace the adoption of standardised risk allocation and documentation at greater scale to achieve more efficient and effective infrastructure development.

Public–private collaboration on standardisation

Argentina recently established a new public-private partnership (PPP) program and enacted legislation to facilitate investment in renewable power. While the longer-term outcomes of these initiatives remain uncertain, particularly in light of the country's current economic instability, the process of establishing and launching these programs exemplifies the benefits of close cooperation between the public and private sectors. In both efforts, the government of Argentina worked closely with the Inter-American Development Bank and the private sector. A few key lessons emerged:

- **Apply best practices from other projects.** With broad experience working on PPP projects across Latin America, the team was familiar with models used elsewhere: their features, what had worked well, and why. This experience guided the choice of structure and standard terms.
- **Tailor to the local context.** The team understood the political and economic context in Argentina, so it was able to properly tailor the program to meet the country's specific requirements and circumstances.
- **Balance the task at hand with the big picture.** The PPP program was designed so that the detailed work on standard documentation focused on the immediate priority-toll roads. At the same time, the overarching "master trust" structure was designed to be replicable across sectors as new priorities emerge. The intention is to develop new standard documentation for different sectors as required, using the existing model as a base and then making minimal changes to tailor it to different infrastructure assets.

- **Focus on bankability.** The PPP program was specifically designed to tap into capital markets funding, so having advisers who were familiar with the market meant that the documentation was bankable from day one.
- **Remove politics from the equation.** The involvement of a multilateral agency helped depoliticise the initiatives. This effect was particularly apparent with the renewables law, which was approved shortly before elections with support from all sides. Establishing standardised programs for infrastructure can help to bridge political divisions, as long as the terms of the program are properly socialised with stakeholders prior to adoption in order to achieve buy-in.
- **Strive for transparency.** The involvement of private-sector participants that were accustomed to scrutinising projects for compliance with international standards in a range of areas, from anti-bribery and corruption to the environment, gave the market confidence in the program's transparency and robustness.

Making best use of existing models

Infrastructure-program design must involve people with relevant expertise to ensure that existing standard models are used and customised to the specific requirements of a particular jurisdiction and sector. Private-sector participants with extensive, varied and often global experience in infrastructure development, can be an invaluable partner to governments in this process.

Of course, one of the biggest challenges facing the public sector is that getting standardisation right requires significant investment at an early stage, when budgets are often constrained. The initial investment should yield future cost savings and better outcomes, but tangible impact may not be achieved in the short term. The private sector therefore needs to better articulate the benefits of standardisation and convince the public sector to collaborate more closely in a program's earlier stages. The private sector must also reinforce best practices by continuing to share examples of successful collaboration with the infrastructure community.

Sharing knowledge and making a commitment to risk-allocation standards

In the absence of a leading authority on risk-allocation standards, individual infrastructure projects tend to be undertaken without reference to a standard model or approach.

Some reticence toward standardised risk allocation is rational. A standard approach requires striking a balance between the parties' competing needs, and some may think a stand-alone negotiation could result in a better deal. For standardisation to work, all parties must agree that the benefits will outweigh any (possibly illusory) downsides.

Industry participants should actively explore ways to facilitate knowledge sharing and encourage collaboration across the sector, particularly as technological tools are developed that could be applied across many areas.

Implementing standard models: Investing in the predevelopment stage

Even with the use of standardised models and risk allocation, individual projects will always include unique features that require some customisation. As such, a common pitfall of using standardised documentation is the perception that the work has already been done, so stakeholders may deploy less experienced or scaled-back negotiating teams to broker specific transactions. This is invariably a false economy. Instead, procuring bodies should aim to build well-advised teams that can identify potential customisation needs at an early stage and avoid unnecessary negotiation and rework.

Participants should also explore new ways to facilitate greater investment in the early stages of projects. For example, the private sector could contribute to the cost of advising governments throughout the process, with such expenditures being recovered in the tender process or as part of the financing.

Bringing in funders at the outset can also build confidence among investors and debt providers. When parties are familiar with the standard structures and terms for a given project, the financing phase typically runs much more smoothly and efficiently.

Where potential financiers are more engaged with early stage project development, this may encourage them to take a more proactive role in designing funding packages that can be offered to governments or developers. We have already seen innovation in this area. The World Bank's Scaling Solar program, for example, offers a package that includes document templates, competitive financing, and insurance products. In the United Kingdom, the national government established a funding aggregator scheme to support the Priority Schools Building Programme through a single bond-financed funding platform that can be used to finance separate batches of schools.

Improving standardised infrastructure investment frameworks could promote the further development of liquidity platforms from a wider variety of debt providers and investors.

Conclusion

While much has been done to develop standardised infrastructure project frameworks, too much scepticism about closer cooperation remains on both sides. A renewed focus on promoting collaboration between the public and private sectors when developing and implementing standardised models is crucial to reaping the full benefits of standardisation.

CONTACTS

Gianluca Bacchiocchi
Partner
New York
T: +1 212 878 8467
E: gianluca.bacchiocchi@cliffordchance.com

Nicholas Wong
Partner
Singapore
T: +65 6410 2218
E: nicholas.wong@cliffordchance.com

Anthony Giustini
Partner
Paris
T: +33 1 4405 5926
E: anthony.giustini@cliffordchance.com

Michael Pearson
Partner
London
T: +44 20 7006 4753
E: michael.pearson@cliffordchance.com

Clare Burgess
Partner
London
T: +44 20 7006 1727
E: clare.burgess@cliffordchance.com

Joanna Lilley
Professional Support Lawyer
London
T: +44 20 7006 4488
E: joanna.lilley@cliffordchance.com

TECHNOLOGY AND THE INFRASTRUCTURE SECTOR:
FOUR TRENDS TO WATCH AND FOUR CHALLENGES

TECHNOLOGY AND THE INFRASTRUCTURE SECTOR:
FOUR TRENDS TO WATCH AND FOUR CHALLENGES

Technology has the potential to transform the infrastructure sector. It is already starting to drive efficiency and cost reduction, and to help organisations within the sector to better understand their customers. But this transformation comes with a number of challenges. Our experts outline the trends that will have a significant impact on the industry and the legal risks to watch out for.

FOUR TRENDS TO WATCH

Artificial intelligence

AI has a potentially wide range of applications in the infrastructure sector, and companies have been investing in a number of areas including:

- Renewable power generation – analysis of wind and operational data to increase production by reducing the impact of high wind hysteresis effects.
- 'Smart' technology – machine learning is being used for monitoring energy efficiency and consumption (smart meters) and in electricity transmission and distribution, to balance supply and demand (smart grids).
- Construction – use of AI in surveying and analyzing materials and structures, for robotics applications such as automated bricklaying, and to improve human-machine interfaces for construction equipment.
- Transport – machine learning is being explored in areas including road maintenance, traffic management, rail and air traffic control systems, port logistics and of course the development of self-driving vehicles. Industrial companies in the sector, such as Ford, are explicitly working towards using AI and other technological applications to transform from pure vehicle manufacturers into "mobility" businesses.

What are the risks?

- **Algorithmic bias**: The growth of AI has significant legal and ethical implications. AI tools make unpredictable decisions and can be biased where the underlying data they use is skewed. There is a risk that by using AI tools, businesses may inadvertently engage in anti-competitive, unethical or market abusive behaviour. Where AI is used in large systems such as electricity grids, the consequences of any failures are magnified.
- **Inadequate regulatory frameworks**: Given the speed with which new technology is introduced, it is unsurprising that rules and regulations lag behind. This is a real concern in highly regulated markets (such as energy and utilities) and carefully balanced energy systems (e.g. power grids). There is a risk that regulatory frameworks are insufficiently flexible or otherwise unfit for purpose to allow the full benefits of new technologies to be realised. Of at least equal concern is the risk that

they are unable to prevent abuse or mitigate market shocks (such as price spikes) when technology allows decisions to be taken quicker than rules and regulators can respond.

- **Antitrust**: There is a likelihood of increased oversight and regulation as the law and regulators catch up with the technology; this may include increased scrutiny of antitrust implications, for instance if there is a concentration of systematically important AI suppliers which creates natural monopolies/oligopolies.

Blockchain (Distributed Ledger technology, DLT)

Numerous companies are currently developing blockchain applications for the infrastructure sector, though none of these have moved beyond the concept or pilot stage yet. Possible applications include:

- Decentralised energy distribution – one trial, run in New York in 2016, involved off-grid-generated energy being sold directly from one neighbour to another through a blockchain system.
- Smart contracts – blockchain makes it possible for systems such as energy networks to be controlled through smart contracts, which would signal to the system when to initiate transactions.
- Electricity usage and supply forecasting – Elia, Belgium's electricity transmission system operator, has been exploring the use of big data blockchain to construct better forecasting models. Improved forecasting has a direct impact on decisions regarding grid investments and sizing of grid tariffs, managing the maintenance of lines and substations, prevention of grid congestion and the sizing of so-called 'ancillary services' (balancing reserves).
- Security of critical infrastructure – as critical infrastructure such as transportation networks and power plants become equipped with connected sensors, so the risks to such systems from hacking grow. Blockchain's 'tamperproof' ledgers could be used to share security data across such networks.

What are the risks?

- **Jurisdiction and applicable law**: Where servers are decentralised and can be spread around the world, pinpointing where a breach or failure occurred (and taking the appropriate cross-border action) may be complex. In the UK, the Financial Markets Law Committee (FMLC) recently published a paper on this subject, emphasising the need to develop an international conflict of laws framework for DLT applications and recommending solutions that could be adopted.
- **Enforceability of smart contracts**: There are currently many open questions across jurisdictions as to the extent to which smart contracts are legally effective and enforceable.
- **Transparency**: As blockchain is trialled as a possible replacement for traditional trading contracts, issues of transparency and regulation are never far away.

Big data

Businesses in the infrastructure sector are increasingly capturing, storing and analysing the data generated by their day to day operations with a view to cutting costs, improving efficiency and reducing risks and downtime. Examples include:

- Electricity generation – using data to ramp flexible assets up and down in response to real and near-real time supply and demand forecasts.
- Utility companies – advanced analytics are being used for a variety of purposes, including reducing procurement costs and managing vegetation along power lines, preventing outages through accurate predictions about when to replace equipment, or responding to an outage in real time, and helping utilities better understand customers and their consumption. This knowledge can then be used to design new products and services.

What are the risks?

- **Data protection**: Privacy laws apply if big data contains any personal information such as names, addresses, health records, bank details or unique identifiers. The obligations of organisations dealing with such data, and the associated compliance risks, have been further magnified by the new EU GDPR regime (see below).
- **Accuracy of datasets**: Data from publicly available sources, from other businesses, or collated by the business itself, may contain errors. These errors may then be included in trend analysis and predictions on which the business depends for strategic and investment decisions.

Robotics and autonomous vehicles

Robots and drones are already widely used in the infrastructure industry, particularly for inspecting difficult-to-access locations such as offshore risers and surveying pipelines and subsea infrastructure. As the use of robotics becomes more widespread and sophisticated, so new legal and commercial issues arise. Looking a little further ahead, the expected transformation of the transport sector with the move towards both electric vehicles and autonomous vehicles will give rise to a raft of new challenges for the sector.

What are the risks?

- **Liability**: Robotics raise a number of difficult questions – if a robot malfunctions and causes damage to property or the environment, who is liable? The manufacturer? The company that deployed it? A range of approaches is under discussion across jurisdictions, including those based on strict liability (no fault required) and risk management (liability of a person who was able to minimise the risks). Businesses in the infrastructure space will need to be aware of these developments and respond accordingly.
- **Antitrust**: Is joint or pooled licensing allowed? Would selling cars at a price materially below market value in order to collect necessary data, but which also keeps out new entrants, be a breach of antitrust laws? If agreements are properly structured then such risks can be minimised, but it will be important for companies active in this area to keep on top of market and regulatory developments.

FOUR CHALLENGES

Cyber security

Infrastructure assets, particularly 'critical infrastructure' assets such as energy and communications systems, have always been vulnerable to physical damage whether from natural or political events or sabotage. Measures to protect against such damage are built into the design, construction and operation of such assets.

Now, the increasing interconnection and digitisation of the industry means that it is also a prime target for cyber criminals, state-sanctioned cyber attacks, terrorists and hacktivists. A large scale cyber attack on critical infrastructure assets could trigger economic and financial disruption, loss of life and environmental damage. Regulators across the globe are responding by putting greater responsibility for cyber security onto industry.

Recent developments in the EU include:

- EU Security of Network and Information Systems Directive (NIS Directive) – this directive was required to be transposed by EU Member States into local law by 9 May 2018. It places new obligations on operators of essential services to ensure the cyber security measures they have in place are appropriate. It has been left to member states to determine the precise details on a nation-by-nation basis, but typical areas covered include identity and access control; service protection; data and system security; and staff awareness and training. In addition, firms face new incident reporting obligations, not only in the context of cybersecurity incidents but also potentially in respect of physical incidents affecting the security of network and information systems. Sanctions (including fines) for noncompliance vary depending on local law, but are onerous.
- Smart metering – in November 2016, the European Commission published a proposal stating that all consumers should be entitled to request a smart meter from their supplier. This has boosted the take-up of smart metering across the EU. The Commission also published a cybersecurity package which proposed greater scrutiny of software and other components used to monitor industrial control systems. These requirements will be relevant for smart meter providers.

Data privacy

Many infrastructure operators will hold significant levels of customer data, including highly sensitive information such as payment details. This data is stored in multiple places including operational systems, CRM systems, data warehouses, analytical datamarts, big data environments and documents. Recent advances in some infrastructure systems, such as smart grids, are introducing a further level of complexity into data management for operators.

Consumers need clarity and reassurance about how their data can be accessed, by whom and for what purposes, and about the choices they have to opt out of data sharing. Accordingly, as businesses start collecting greater volumes of personal data, they must ensure that they are complying with global data privacy regulations.

The EU General Data Protection Regulation (GDPR) came into force on 25 May 2018. It seeks to modernise EU law on personal data and at the same time has introduced a raft of stricter rules on data security. Significantly, the GDPR will bring with it increased reporting and compliance burdens for companies who hold significant amounts of personal data, including:

- Enhanced rights for data subjects.
- A broader extra-territorial scope.
- New sanctions – regulators can impose fines of up to 4 per cent of global turnover (or EUR 20 million, whichever is higher).

Intellectual assets

Energy and transport have for many years been among the leading sectors for filing patent applications, and advances in technology, particularly around renewable energy, have substantially increased the number of patents issued in the energy sector in particular. This trend is expected to continue.

All businesses with potentially valuable IP must be alive to:

- **Protecting value**: Where a business amasses large, valuable IP portfolios on which its proprietary processes are reliant, it is essential to ensure that adequate IP protections are in place to guard against potential infringement by competitors.
- **Patent assertion entities/non-practising entities (NPEs)**: The risk posed by NPEs is growing. NPEs obtain the rights to one or more patents in order to profit by means of licensing or litigation, rather than by producing their own goods or services. A recent study by the Boston Consulting Group has shown that NPEs are increasingly targeting the energy industry, with a steady increase in the number of lawsuits brought by NPEs against energy companies.

Increasing use of technology on infrastructure projects, for instance in the renewable energy sector, has already started to demand changes to the way that contractors and OEMs deal with IP issues. Areas of focus include disclosure and “competitor” clauses (including the use of escrow arrangements) and restrictions in assignment and change of control clauses. Approaches to licensing of data are also starting to change, as asset owners and OEMs alike are keen to explore how data-mining could help increase efficiencies across a portfolio of infrastructure assets.

Tech M&A

Infrastructure businesses are increasingly investing in, or acquiring, tech start-ups to bring expertise ‘in-house’ and it’s a trend that looks set to continue. According to a study by Mergermarket, the number of mergers and acquisitions across the technology, media & telecom (TMT) sector reached an all-time high in 2017, with 3,389 deals worth a combined US$498.2 billion. The volume of acquisitions has also increased, with CB Insights finding the number of AI start up acquisitions growing fivefold, from 22 in 2013 to 115 in 2017. Within the energy sector alone, a 2017 study by accountancy firm BDO found that mergers and acquisitions involving energy companies and AI start-ups soared in average value from around $500 million in the first quarter of 2017 to $3.5 billion in the second quarter.

M&A of technology companies, particularly the smaller ventures that are common in the industry, brings specific considerations, including:

- **Identification of assets/value**: The question of what is actually being sold/purchased is key. Often third parties, whether licensors, developers, founders, employees or others, claim licences to or other rights in algorithms, code, trade secrets and other key intellectual property. Securing robust invention assignment agreements from all past and current contractors and employees is critical, among other protections, to ensure the buyer is receiving all that has been paid for.
- **Purchase price consideration**: The consideration for the acquisition can also be complex. Many purchases in this space will tie the eventual consideration to factors such as customer sales, EBITDA or other objective benchmarks, and can involve complicated earn-out mechanisms.
- **Due diligence**: Performing due diligence on target tech companies can be challenging. Many are early-stage businesses founded by young and inexperienced entrepreneurs and often do not have proper record-keeping processes in place or understand the importance of maintaining paper trails. This creates a sizeable task for the buyer as it tries to assess the risks involved in the acquisition.

Our M&A Trends 2018 report contains further detail and additional factors to consider for tech M&A deals. The report can be found on our Global M&A Toolkit.

CONTACTS

Technology

Jonathan Kewley
Partner
London
T: +44 20 7006 3629
E: jonathan.kewley@cliffordchance.com

André Duminy
Partner
London
T: +44 20 7006 8121
E: andre.duminy@cliffordchance.com

Dessislava Savova
Partner
Paris
T: +33 1 4405 5483
E: dessislava.savova@cliffordchance.com

Claudia Milbradt
Partner
Düsseldorf
T: +49 211 4355 5962
E: claudia.milbradt@cliffordchance.com

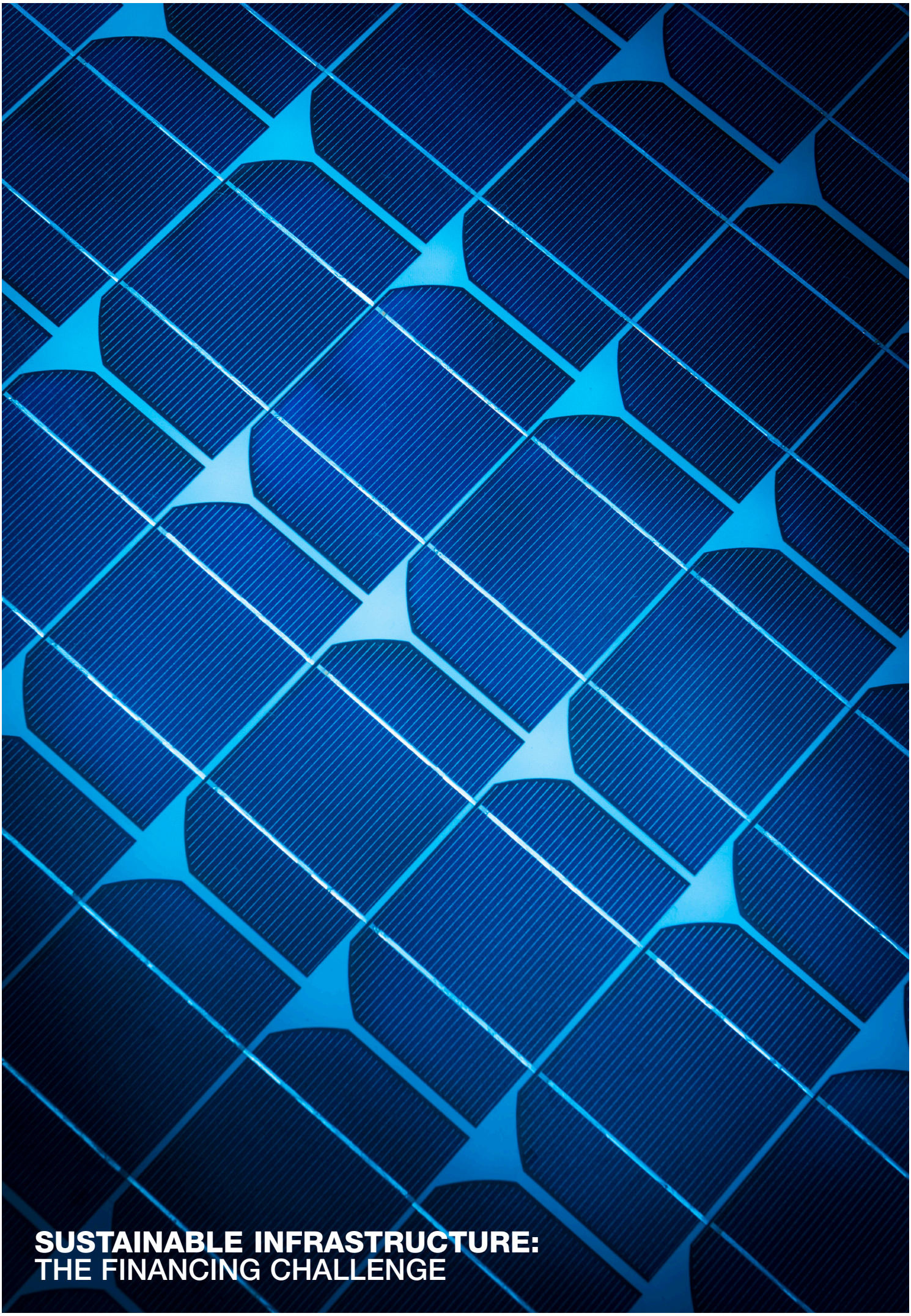
Infrastructure

Michael Pearson
Partner
London
T: +44 20 7006 4753
E: michael.pearson@cliffordchance.com

James Pay
Partner
London
T: +44 20 7006 2625
E: james.pay@cliffordchance.com

David Metzger
Partner
London
T: +44 20 7006 4240
E: david.metzger@cliffordchance.com

Praveen Jagadish
Senior Associate
London
T: +44 20 7006 4320
E: praveen.jagadish@cliffordchance.com



SUSTAINABLE INFRASTRUCTURE:
THE FINANCING CHALLENGE

SUSTAINABLE INFRASTRUCTURE:
THE FINANCING CHALLENGE

The recently published IPCC special report on the impact of global warming predicts that an unprecedented level of sustainable infrastructure investment will be needed every year until 2050 and beyond to limit global warming to the Paris Climate Agreement's target of 1.5°C. Here we explore the challenges facing infrastructure investment and the potential role of the 'green finance' market, governments and multi-laterals in achieving this objective.

Sustainable Infrastructure – What, Why, How?

What do we mean by "Sustainable Infrastructure"?

Sustainable development was defined over thirty years ago as:

"*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*"
(World Commission on Environment and Development, 1987)

Whilst sustainable infrastructure has no universally agreed meaning, it is generally taken to encompass infrastructure in the broadest sense (transport, energy generation and transmission, buildings, water and marine resources, recycling, pollution prevention) which is economically, socially and environmentally sustainable. Focussing on environmental sustainability, this may mean in practice that the infrastructure has a low carbon footprint, is constructed from sustainable materials, is powered by or generates renewable energy, or is resilient to, or has been adapted to, the changing climate.

Why is it important?

The existing stock of global infrastructure and its use accounts for more than 60 per cent of greenhouse gas emissions, and we are set to triple the global infrastructure stock by 2030, and around 70% of the new infrastructure needs are in the developing economies. If the new infrastructure mirrors the existing stock, there will be distinct challenges to the reduction of emissions and provision of sufficient protection from the impact of the changing climate, including rising sea levels, increasing temperatures and more extreme weather events. More positively, sustainable infrastructure can be a driver for achieving the UN Sustainable Development Goals and, according to the Global Commission on the Economy and Climate, presents an economic opportunity of US$26 trillion to 2030.

How to secure the necessary investment in sustainable infrastructure?

One of the key challenges to realising this rapid change to global sustainable infrastructure is unlocking the investment required to make it happen fast enough and across all geographies. There is potential for 'green finance' to play a significant role, and there are steps that governments and multilaterals can take to support and enable the necessary investment.

UN Sustainable Development Goals

The UN has set out the following Goals as part of the 2030 Agenda:

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Production and Consumption
13. Climate Action
14. Life Below Water
15. Life On Land
16. Peace, Justice and Strong Institutions
17. Partnerships for the Goals

What are the challenges?

In order to limit climate change within the Paris Climate Agreement targets, there are multiple challenges to be met including:

- The speed with which capital needs to be mobilised and sustainable infrastructure constructed if the global temperature rise is to be kept below 1.5 °C above pre-industrial levels.
- The need to ensure the development of sustainable infrastructure in all regions where it is needed, but particularly in developing countries where the need for infrastructure is most acute and whose peoples are most vulnerable to the changing climate.
- It is not only new infrastructure that is required; existing infrastructure needs to be modified to become resilient to the changing climate. The benefits of modifications to increase resilience, and the additional costs of climate change adaptation for new projects, can be difficult to quantify and therefore less attractive to investors.

Whilst the need for rapid investment in sustainable infrastructure is evident and presents opportunities for investors and developers as well as those who stand to benefit from its construction, there are also significant hurdles to accessing the financing needed to effect this change, including:

- Sustainable infrastructure is perceived as being more expensive than higher-carbon equivalents.
- Investment in infrastructure during construction and before the asset starts to generate revenue can be more difficult and more expensive to finance.
- The changing climate, particularly the ability to tolerate extremes of temperature and rainfall at both ends of the spectrum, can be difficult to model with precision and introduces an additional layer of uncertainty for infrastructure assets that typically have a long lifespan and investor return profile.
- Some types of infrastructure investment required to meet the Paris Climate Agreement target do not have an obvious revenue stream; for example, the upgrade of distribution networks required to cope with fluctuations caused by renewable energy and the increasing use of electric vehicles. New and unproven technologies, or technologies for which the rate of public uptake is unpredictable, such as electric car charging infrastructure, can also struggle to attract investment.

Green finance

There is no shortage of private capital which could be tapped into to fund sustainable infrastructure, with an estimated US$120 trillion under management in global pension funds, insurance companies and other institutional investment firms (though less than 2 per cent of these funds are currently invested in infrastructure). Investor appetite for clean investments is demonstrated by the strong market for renewable energy projects and the growth of the green bond market, but more well-structured, bankable opportunities are required.

Solar and wind are well-established technologies that easily tick the "green" box. It is important now that the green finance market grows to fund other areas, such as modifications to electricity grids, improvements to make new and existing building stock more energy efficient and the electrification of transport.

It has been suggested that market-recognised labels will assist with this scaling up of investments. There are a number of projects in this regard globally, including the Climate Bonds Initiative, the Green Bond standards in China, and various development bank projects. More detail is provided on market-led green finance initiatives and the current EU legislative proposals below.

Green Bond Principles and Green Loan Principles

The Green Bond Principles, and related Green Loan Principles, are a set of voluntary process guidelines, published by ICMA and the LMA respectively, recommending transparency, disclosure and reporting on the use of proceeds to encourage capital flow to environmentally sustainable projects. They have been widely adopted by market participants.

The standards, though they do refer to categories of green investment, are relatively flexible, and this has arguably supported the relatively fast growth in these new products (albeit still a small proportion of the overall bond and loan markets).

Indeed, we have recently seen Innogy, as issuer of a green bond, utilise the flexibility afforded by its green framework to reallocate the proceeds of its 2017 green bond issuance from the refinancing of onshore and offshore wind parks to works on the electricity grid for the connection of renewables (and other changes required to enable the grid to cope with fluctuations caused by renewable electricity and facilitate the charging of electric vehicles), as well as the financing of smart metering to enable consumers to monitor (and reduce) energy consumption. In doing so, Innogy provided disclosure and comfort to the market by explaining the change and providing a second opinion from Sustainalytics (a provider of ESG and corporate governance research and ratings), confirming that the new projects were in line with Innogy's green bond framework and the Green Bond Principles.

As mentioned, this flexibility can drive growth, but some fear that the market may suffer from "green-washing", where investments are labelled green but are not "green enough".

EU Sustainable Finance Action Plan

In part to counter this concern, the EU Commission has published legislative proposals (within the Sustainable Finance Action Plan) aimed at establishing an EU sustainability taxonomy, formalising investor duties and disclosure obligations and the creation of low carbon and positive carbon impact benchmarks.

The bar for an activity to be sustainable under these proposals is set relatively high, requiring the activity to contribute substantially to one or more of six environmental objectives. This has raised concerns around activities that do not meet this bar being deemed to be unsustainable and therefore failing to attract financing, as well as questions around the relationship between the EU's proposed taxonomy and that already in place under the Green Bond and Green Loan Principles. These issues are discussed in more detail in our client briefing The EU's Sustainable Finance legislative proposals – What you need to know.

Converging standards?

It remains to be seen how widely adopted these standards, and others set by ASEAN and even individual countries, will become and whether there will be a global convergence of standards. But regulators and other market participants are reacting quickly to offer investors a range of standards and disclosure obligations in a bid to attract the vast amounts of capital needed if the Paris Climate Agreement targets are to be met.

What is the Role of Governments and Multilaterals?

As noted above, there are various challenges in attracting private finance to sustainable infrastructure, including the perception that sustainable infrastructure is more expensive than higher-carbon equivalents (therefore offering lower returns to investors), or that it is too risky, either because of the use of new, unproven technology, the rate of uptake of the technology being unpredictable, increased uncertainty associated with the changing climate and rising sea levels, or simply the long-term nature of many infrastructure assets that exposes them to changes in government policy.

Governments are incentivised to take action to facilitate sustainable infrastructure development both to ensure their own commitments under the Paris Climate Agreement are met and to ensure the required infrastructure is put in place to mitigate the effects of climate change at a national level. Governments can level the playing field and encourage private investment in many ways, including the following:

- Identifying a clear pipeline of infrastructure investment and providing a stable regulatory regime. The renewable energy market shows what a combination of government policy and private sector investment can achieve. Government incentive schemes have provided support to that pipeline of investments, which in turn has allowed for investment in design and manufacturing, which has driven down the cost of the technologies, so that offshore wind and solar can now more easily compete with fossil-fuelled power generation.
- Considering alternative concession structures to help attract investment. This could include structures which provide for payments during the construction phase of the infrastructure, similar to that used for the Thames Tideway project in London, which in turn attracted a wider range of investors for debt and equity.
- Funding or guaranteeing revenue streams for projects where the revenue would otherwise not be obvious or sufficiently certain. In some cases, governments may see a saving elsewhere in the budget by doing this. For example, funding distributed

solar power schemes may mean lower demand on (and therefore reduced need for government investment in) power grids or subsidised power.

- Emphasising the need for participants in the financial system to consider the environmental impact and resilience of their investment decisions, which may be done through regulators. The EU's sustainable finance legislative proposals are an example of regulatory intervention of this type, and apply to asset managers, insurance undertakings, pension funds and investment advisers. Recommendations from the Taskforce on Climate-related Financial Disclosures (TCFD) have a similar impact if adopted on a voluntary, or mandatory, basis;
- Putting a price on carbon, as is currently in place or planned by 70 countries or jurisdictions. Carbon taxation, in some cases alongside emissions trading systems, will generally make sustainable infrastructure look better value when compared to higher-carbon options, once the costs of aggregate emissions over the life of the asset are considered. The effectiveness of this approach depends on the rate at which such taxes are set, which can vary widely, and how such taxation is applied.
- Taking, or encouraging or funding multilaterals to take, certain risks which "crowd-in" private sector investment. This could involve taking more risk during the construction or development phase of projects, including risks of new technologies, or taking specific risks which the private sector cannot (or cannot at an efficient price) bear, such as change of law, regulatory or certain currency risks.

The final point can be particularly relevant to ensuring the development of sustainable infrastructure in developing nations, where around US$1.2-1.5 billion is needed in annual infrastructure investment to close the development gap. In such regions, political instability coupled with a dependence on government support for subsidies, poor investment environments and currency risks are additional barriers to infrastructure investment. Yet some of these countries are those most exposed to the effects of climate change in the short and longer term and unless infrastructure need is met with investment in low-carbon, sustainable and resilient infrastructure, there is a risk that carbon reduction achievements in more developed regions are counteracted by increasing infrastructure-related emissions in developing countries.

In such locations, multilateral funds including the Green Climate Fund and Global Environment Facility as well as national funds such as the UK's International Climate Fund can be utilised to reduce the risk profile of projects to a level that becomes competitive to private capital, to support domestic financial institutions and to foster in-country expertise in financial instruments, sustainability standards and reporting and improving the bankability of the sustainable infrastructure pipeline.

In addition, developing infrastructure which is truly sustainable from a social and economic, as well as environmental, perspective arguably reduces political risk, as the projects will be supported by the communities they serve.

The scale of the challenge is significant, but ensuring investment in sustainable infrastructure is a global necessity.

CONTACTS

Clare Burgess
Partner
London
T: +44 20 7006 1727
E: clare.burgess@
cliffordchance.com

Nigel Howorth
Partner
London
T: +44 20 7006 4076
E: nigel.howorth@
cliffordchance.com

James Pay
Partner
London
T: +44 20 7006 2625
E: james.pay@
cliffordchance.com

Michael Pearson
Partner
London
T: +44 20 7006 4753
E: michael.pearson@
cliffordchance.com

Felicity Ward
Senior Associate
London
T: +44 20 7006 4504
E: felicity.ward@
cliffordchance.com

Jessica Walker
Senior Professional
Support Lawyer
London
T: +44 20 7006 2880
E: jessica.walker@
cliffordchance.com

Peter Pears
Senior Associate
London
T: +44 20 7006 8968
E: peter.pears@
cliffordchance.com

Michael Coxall
Senior Professional
Support Lawyer
London
T: +44 20 7006 4315
E: michael.coxall@
cliffordchance.com

James Shepherd
Senior Associate
London
T: +44 20 7006 4582
E: james.shepherd@
cliffordchance.com

INFRASTRUCTURE:
DOES NATIONAL SECURITY NOW MEAN ECONOMIC SECURITY?

INFRASTRUCTURE:
DOES NATIONAL SECURITY NOW MEAN ECONOMIC SECURITY?

Governments historically have intervened relatively rarely in deals involving foreign investment, focusing primarily on transactions in the defence sector. Now, the scope for intervention is expanding dramatically, driven by a wider interpretation of national security. Politics and protectionism are taking centre stage. Investors in the infrastructure sector will need to be alive to these trends and the potential impact on their existing investments and their ability to make future investments.

A number of countries are implementing foreign investment review systems, or strengthening their existing regimes, primarily (but not exclusively) in response to a wave of outbound foreign investment by Chinese investors.

We are seeing political tensions and changing trade dynamics having a marked impact on individual deals. For example, the extensive delays in Chinese merger control clearance that eventually killed the Qualcomm/NXP deal in June/July 2018 were widely regarded as being a consequence of the unfolding US/China trade conflict.

Interestingly, we are also starting to see government scrutiny of deals based not on the buyer's nationality, but on the basis of a wider concern that the target's R&D would not be maintained. If this is a new trend, all buyers need to take heed, and not just those linked to China.

Regulatory restrictions are changing, but dealmakers must also be conscious of the influence of the public and political mood on a deal's likelihood of success.

In this briefing, we provide an overview of developments in some key jurisdictions

Qualcomm/NXP (Semiconductors) – Chinese intervention, July 2018

- The US company Qualcomm called off its acquisition of NXP, a Dutch global semiconductor manufacturer, after repeated delays in securing merger control clearance from the Chinese antitrust authorities. The deal had been announced almost two years earlier in October 2016 and had received clearance from eight other antitrust agencies.
- While denied by the Chinese authorities, it was widely speculated that the deal was a victim of cross-fire in the developing US/China trade conflict, following the Trump administration's imposition of tariffs on Chinese imports.

USA

Trump widens the scope for government intervention

President Trump has said 'American strategy recognises that economic security is national security'. There is now a sense that this is being reflected in reviews by the Committee on Foreign Investment in the United States (CFIUS). Deals with foreigners in financial services, pharma, telecoms, aeronautics, robotics and other emerging cutting-edge technologies are under more scrutiny, particularly when they involve Chinese buyers.

In addition, new legislation (FIRRMA) passed in August 2018 expands the scope of CFIUS, introducing a greater focus on critical emerging technologies and bringing passive and non-controlling investments into scope, as well as investments in real estate.

CFIUS Overview

The President of the United States can block or unwind any investment in a sensitive US business if it could result in a foreign person gaining control of that business and the associated threat to US national security cannot otherwise be mitigated. This process is managed through CFIUS. While traditionally CFIUS focused on deals involving core national security (defense, transportation infrastructure, energy and government supply chains), in recent years this has widened to include the technology and financial sectors.

Until recently, requesting a pre-closing clearance from CFIUS has always been voluntary, but transactions not submitted for prior review ran the risk of CFIUS initiating its own review and possibly blocking or reversing the transaction after closing. The formal review process starts when the parties submit a notice to CFIUS (or when the Committee initiates its own review) and concludes—usually some months later—with either clearance to proceed or rejection of the application and potential blocking by the President. In cases where CFIUS perceives a risk to national security or critical infrastructure, the Committee may also require mitigation and modifications to the transaction to limit foreign control or access to sensitive US technologies or assets. Recently, CFIUS has refused to approve transactions in cases that previously might have cleared with a mitigation agreement, and insisted on mitigation in a broader range of cleared transactions than previously.

Ant Financial/MoneyGram (Financial Services) – US intervention, January 2018

- Ant Financial – part of the Chinese Alibaba group – terminated its attempted acquisition of MoneyGram following opposition from CFIUS.
- A reported concern of CFIUS was that the deal would have given Ant Financial access to 2.4 million bank and mobile accounts of MoneyGram's US customers. This was one of the first examples of access to citizens' personal data being cited as a national security concern. Commitments offered by Ant Financial – e.g. to keep the information in the US and handled only by US citizens – were not sufficient to quell those concerns.

"Scrutiny in the US remains particularly focused on China, to the extent that even where no obvious China nexus exists on a deal, any Chinese involvement is now frequently analysed at the start of an M&A deal as a potentially significant risk factor."

—**JOSH FITZHUGH**
US Regulatory Counsel

Foreign Investment Risk Review Modernization Act (FIRRMA)

In August 2018, the US government introduced the Foreign Investment Risk Review Modernization Act (FIRRMA), imposing significant new restrictions on inbound investment into the United States. FIRRMA intensifies the foreign investment review process run by CFIUS in a number of ways, including:

- A sharper focus on investments that present less obvious strategic threats, but which are viewed as of concern over the longer term
- Expanded CFIUS jurisdiction to review "passive" or non-controlling investments
- Enhanced attention to countering what is perceived to be China's efforts to develop its own know-how at the expense of US firms
- Introduction of mandatory filing requirements for foreign investments in any business involved in certain "critical technologies" in any of 27 industrial sectors. Failure to file when required could expose the parties to civil penalties equal to the entire value of the transaction
- Filing fees up to $300,000 per transaction.

For investments from allied counties, FIRRMA implementation is likely to result in a CFIUS process that applies to more transactions but may move more quickly and easily. Investments involving China or other countries of concern to the US government will likely face a lengthier review process and increased scrutiny, particularly in emerging or high-technology sectors.

Broadcom/Qualcomm (Communications chipmaker) – US intervention, March 2018

- President Trump issued an Executive Order blocking the acquisition of US chipmaker Qualcomm by Broadcom, a Singapore based business that had committed to relocate to the US.
- A key concern voiced by CFIUS was that Broadcom would reduce Qualcomm's R&D spending, so allowing Chinese companies to replace it as a leader in 5G technology and standard setting. In this way the intervention was seen in the market as a specific counter to the Made in China strategy, as well as a move to protect the US's own national security interests.

Europe

Similar trends towards greater protectionism have been seen across Europe.

The table below summarises the laws in major EU countries that allow foreign investments to be blocked or subject to remedies on the grounds of national security or public interest. Proposed changes to these laws are highlighted **in red**.

	Proposed changes?	Type of filing/ penalties	Trigger events	Risk assessment factors
EU 	**Yes, Regulation expected to come into force in 2019**	No filing or pre-approval requirement	N/a **Proposals would allow EC to review and issue a non-binding opinion on any investment by a non-EU investor creating lasting and direct links (eg participation in management or control) with an EU target, if the investment is likely to affect projects or programmes of Union interest (eg Trans-European energy, transport, telecoms networks, Galileo satellite system, advanced technology R&D)**	N/a **Target has activities in satellites, transport, energy, telecoms networks or advanced technology** **Regulation would allow EC and EU Govts to take into account whether a foreign investor is an SOE**
UK 	**Yes, White Paper under consultation, expected to come into force Q1 2020 or later**	Voluntary filing No pre-approval required **Pre-approval required if called in for review** **Criminal and civil penalties (eg up to 5 years in prison) for breach**	Acquisition of material influence/ control over target and either (i) target has £70m of UK turnover, or (ii) 25% market share created or increased Lower thresholds (eg £1m of UK turnover) apply if target has certain advanced tech, computer hardware or military/dual use activities **Acquisition of 25% of votes or shares or (if less) significant influence/control over target (incl non-UK entity) with activities in/sales to UK or any asset or IP right (inside or outside UK) used in connection with UK activities/sales – no monetary thresholds** **Appointment of single director can trigger**	Target active in defence, critical infrastructure*, advanced tech, media Investor owned/controlled by "hostile party" (but any foreign and even UK investors can be caught) No express discrimination against SOEs **Factors to be set out in formal statement of policy intent**
Germany 	**Yes, expected to come into force this year**	Mandatory filing No pre-approval required or penalties for breach (but 5 year period for Govt intervention if no filing)	Sector-specific (defence): any acquisition by non-German buyer of 25% or more **(15% or more)** of the voting rights in German targets manufacturing weapons or certain cryptographic products Cross-sectoral (critical infrastructure*, certain IT): Any acquisition by non-EU buyer of 25% or more **(15% or more)** of the voting rights in a German target	Target active in defence, critical infrastructure*, certain IT Buyers who are SOEs generally face closer scrutiny

	Proposed changes?	Type of filing/ penalties	Trigger events	Risk assessment factors
France 	**Yes, draft bill is before the French Parliament, intended to be adopted in 2019**	Mandatory filing Pre-approval required. Penalties for breach include fines and criminal sanctions (up to 5 years in prison) **Higher fines for breach: up to 10% of turnover or double value of investment or €1m (individual) or €5m (legal entity)**	Mandatory filing for acquisitions of control of a French target (or 33.3% if buyer is non-EU) with activities in critical infrastructure*, defence, public health protection or that are liable to jeopardise public order (e.g. gambling) **Scope of target activities to be broadened to include semiconductors, space, drones, AI, cyber security, robotics and large-scale data storage** Govt can also intervene exceptionally in any deal filed under the merger control regime on certain public interest grounds (e.g. industrial development, employment)	Target active in defence, critical infrastructure*, media **Target active in semiconductors, space, drones, AI, cyber security, robotics or large-scale data storage**
Italy 	No	Mandatory filing and pre-approval required Penalties include fines of up to twice value of deal	Golden powers: various businesses in defence, energy, transport and telecoms sectors are subject to "golden powers", allowing Govt to veto their acquisition Non-EU buyers must notify acquisitions of control over "strategic" target assets in energy, transport, telecoms and high-tech sectors	Target active in defence, critical infrastructure*, strategic assets in high tech sectors and media
Spain 	No	Mandatory filing. Pre-approval required. Penalties include fines of up to the value of transaction	Any foreign investment in a target with activities directly related to defence, subject to an exception for investments of less than 3% in listed targets with no direct or indirect role in management	Target active in defence sector
Netherlands 	**Yes, adoption date not yet known**	N/a	N/a **Govt considering notification requirement for acquisitions of control over a Dutch telecommunications target**	N/a
Switzerland 	**Yes, but very early stage**	Mandatory filing and pre-approval requirement	Direct or indirect acquisitions or financing by foreign investors of residential property (or companies/ funds owning such property) **Proposed legislation would extend restrictions to foreign investments in strategic energy infrastructure**	Any foreign investment in residential real estate is a risk **Target active in strategic energy infrastructure**

* Critical infrastructure is defined differently in different jurisdictions but typically includes utilities, energy networks/generation, transportation (rail, ports, airports etc), telecommunications, financial services, food, emergency services, healthcare and critical suppliers to operators of such infrastructure (e.g. software/IT).

European Union (EU)

In September 2017, the European Commission presented proposed legislation that would create an EU framework for screening of foreign takeovers and investments on grounds of security and public policy. The proposal is the culmination of recent policy development in response to concerns "voiced about foreign investors, notably state-owned enterprises, taking over European companies with key technologies for strategic reasons" (as per the Commission's May 2017 "Reflection Paper on Harnessing Globalisation"). France, Germany and Italy have been at the forefront of those calling for further screening of foreign acquisitions, pointing out that the US, China and Japan, among others, already have similar systems in place.

The draft Regulation would allow the Commission to review (but not block) certain investments of "Union interest" and to issue a non-binding opinion to the member state in which the investment takes place. It would also clarify the scope of the issues that member states may take into account when applying their national screening regimes without falling foul of EU law, set certain common standards for those regimes and implement a system of cooperation and information exchange between member states and the Commission.

The legal confirmation that member states may legitimately block foreign takeovers involving critical infrastructure, technologies, raw materials and sensitive information could lead to some member states introducing new foreign investment screening regimes or broadening the scope of their existing regimes and, in either case, reviewing transactions that are not, at present, caught.

However, proposals by some member states for an EU-wide foreign investment regime were rejected at a meeting of the European Council in June 2017 by a number of smaller member states, who were keen not to deter investment into their countries. This suggests that the impact of the reforms, if implemented, will vary greatly between EU countries, with some continuing to welcome investment in domestic owners and suppliers of "critical" infrastructure, technologies and inputs and others seeking to exercise broader screening powers, in line with the proposed legislation.

The draft Regulation is currently subject to negotiation between member states' governments and the EU institutions and is likely to come into effect in 2019, following approval by member states and the European Parliament.

UK

In the UK, since June 2018 new lower thresholds have applied to determine whether the government can call in a transaction for a national security review. The new thresholds apply to deals involving targets with certain activities involving intellectual property or roots of trust relating to computer processing units (CPUs), military or dual-use products, or quantum technologies. Such target businesses can be called in if they have a 25% or larger share of the supply in the UK of the relevant products or services, or turnover in the UK of £1 million or more (significantly lower than the £70 million threshold that applies to all other transactions).

The new thresholds are just the first step in a series of proposed reforms to bolster the UK government's powers to review foreign investments on national security grounds. In a White Paper published in July 2018, the government set out its vision for a standalone national security regime which would be applicable to a much wider range of transactions. Effectively, any deal giving significant influence over a business or asset of 'national interest' would become reviewable.

"It remains to be seen whether the Commission will take a less strict approach towards protectionism by member states of national champions that are active in strategic sectors."

—**MARC BESEN**
Antitrust Partner,
Dusseldorf/Brussels

While the regime will remain voluntary, transactions that are called in for review by the government would become subject to an automatic prohibition on closing (unless already closed) and potential interim measures. The government expects around 200 transactions per year will be notified, with around 100 becoming subject to review on national security grounds, compared to only one or two at present.

The proposed regime will apply to:

- Acquisitions of more than 25% of votes or shares in an entity, or less than 25% if "significant influence or control" is acquired
- Acquisitions of more than 50% of an asset, or of significant influence or control of an asset – the definition of an asset is broad, encompassing real and personal property (within or outside the UK, subject to a UK nexus test), contractual rights and intellectual property
- New projects and loans – the above tests for acquisitions would apply for interests in new projects, even if at the time of the investment these do not amount to functioning businesses. They could also catch loans, where an asset with national security significance is collateral for the loan or if the financing documents give lenders certain rights in respect of the relevant asset.

If the government concludes that a transaction poses a national security risk, it will be able to impose such remedies as it reasonably considers necessary and proportionate to prevent or mitigate that risk. These may include structural remedies (e.g. divestment), behavioural remedies or outright prohibition or unwinding of a transaction.

While the government has emphasised that it intends for the UK to remain open to foreign investment and that its proposals have been designed with the sole aim of addressing legitimate national security concerns, there is a risk that the regime could become a Trojan horse for other, undisclosed considerations to be taken into account by this or future governments, such as protectionism of national champions or a merger's impact on employment.

Melrose/GKN (Engineering and defence) – UK scrutiny, March 2018

- The UK government threatened to subject Melrose's acquisition of GKN to a national security review. Long-term investment and stability in the target's business was cited as a matter of national security, and the (British) buyer's business model – in particular Melrose's 'short term approach to ownership' – was seen as potentially incompatible with that need.
- To avoid a review, Melrose agreed pledges on R&D expenditure, HQ location and agreed not to make certain business disposals without Government consent

Germany

In Germany, a new draft law proposes mandatory filing triggered at 15% of a company's voting rights (rather than the existing 25% threshold). This would apply to acquisitions in sensitive business areas, in particular defence-related businesses, critical infrastructure and civil security-related technologies

In the *Leifeld* case, the German government issued its first ever authorisation to prohibit a foreign acquisition of a German target. It remains to be seen whether this will be the culmination of a paradigm shift towards tighter control of foreign investments. Whilst stricter controls of foreign direct investments had been in place for some time already, they had not resulted in any outright prohibitions – cases such as Osram/

Ledvance and Cotesa entailed long discussions and were subject to commitments but were eventually cleared. The Leifeld decision seems to be the culmination of a development that has gained momentum following the revocation of a certificate of non-objection in the Aixtron case and the intervention in the proposed acquisition of a minority stake in 50Hertz (German electricity transmission grid operator) to put tighter control on Chinese investments.

Yantai Taihai/Leifeld Metal Spinning (Mechanical engineering) – German intervention, August 2018

- The German government authorised the Federal Ministry for Economic Affairs and Energy to prohibit the acquisition by the Chinese firm Yantai Taihai of Leifield Metal Spinning, a manufacturer of mechanical engineering products that are used primarily in the automotive and aviation sectors, but also could have nuclear industry applications.
- The Ministry's concerns reportedly centred on the potential transfer of sensitive know-how and technology to China for military purposes. This is the first ever deal to be formally authorised for prohibition by the German government.

Australia

In July 2018, the new Security of Critical Infrastructure Act 2018 came into force. This legislation is intended to safeguard Australia's critical infrastructure from national security risks. Through increased information gathering, the government will understand who owns and operates critical infrastructure assets, and has enhanced powers to mitigate any identified national security risks. The measures are asset-specific and ownership neutral, so apply to both domestic and foreign owners.

The Act introduces three new measures:

- an asset register, to give the government visibility over who owns and controls critical infrastructure assets
- an information gathering power, enabling the government to obtain detailed information from owners and operators of critical infrastructure assets in certain circumstances to support the work of the Critical Infrastructure Centre (which was set up by the Australian government in January 2017 to identify and manage national security risks relating to critical infrastructure)
- a 'last resort power' allowing the government to intervene and issue directions in cases where there are significant national security concerns that cannot be addressed through other means.

The electricity, water, ports, agriculture, communications and gas sectors have been highlighted as areas of particular focus for the Australian government.

Conclusion

While these developments are mainly aimed at Chinese investors, they are likely to have a broader impact on infrastructure investments in the countries in question. In many of these countries, large portions of the infrastructure sector are now deemed to be "critical", including telecoms, transport, energy, healthcare and financial services. For these areas, a reduced pool of buyers could affect asset valuations and exit strategies. Moreover, the flexibility of the concept of national security means that it can be stretched to suit more nakedly protectionist aims, potentially affecting all foreign investors.

CONTACTS

Jenine Hulsmann
Partner
London
T: +44 20 7006 8216
E: jenine.hulsmann@cliffordchance.com

Alex Nourry
Partner and Head of London Antitrust Practice
London
T: +44 20 7006 8001
E: alex.nourry@cliffordchance.com

Joshua Berman
Partner
Washington D.C.
T: +1 202 912 5174
E: joshua.berman@cliffordchance.com

Josh Fitzhugh
Partner
Washington D.C.
T: +1 202 912 5090
E: joshua.fitzhugh@cliffordchance.com

Marc Besen
Partner
Düsseldorf
T: +49 211 4355 5312
E: marc.besen@cliffordchance.com

Dimitri Slobodenjuk
Counsel
Düsseldorf
T: +49 211 4355 5315
E: dimitri.slobodenjuk@cliffordchance.com

Dave Poddar
Partner
Sydney
T: +61 2 8922 8033
E: dave.poddar@cliffordchance.com

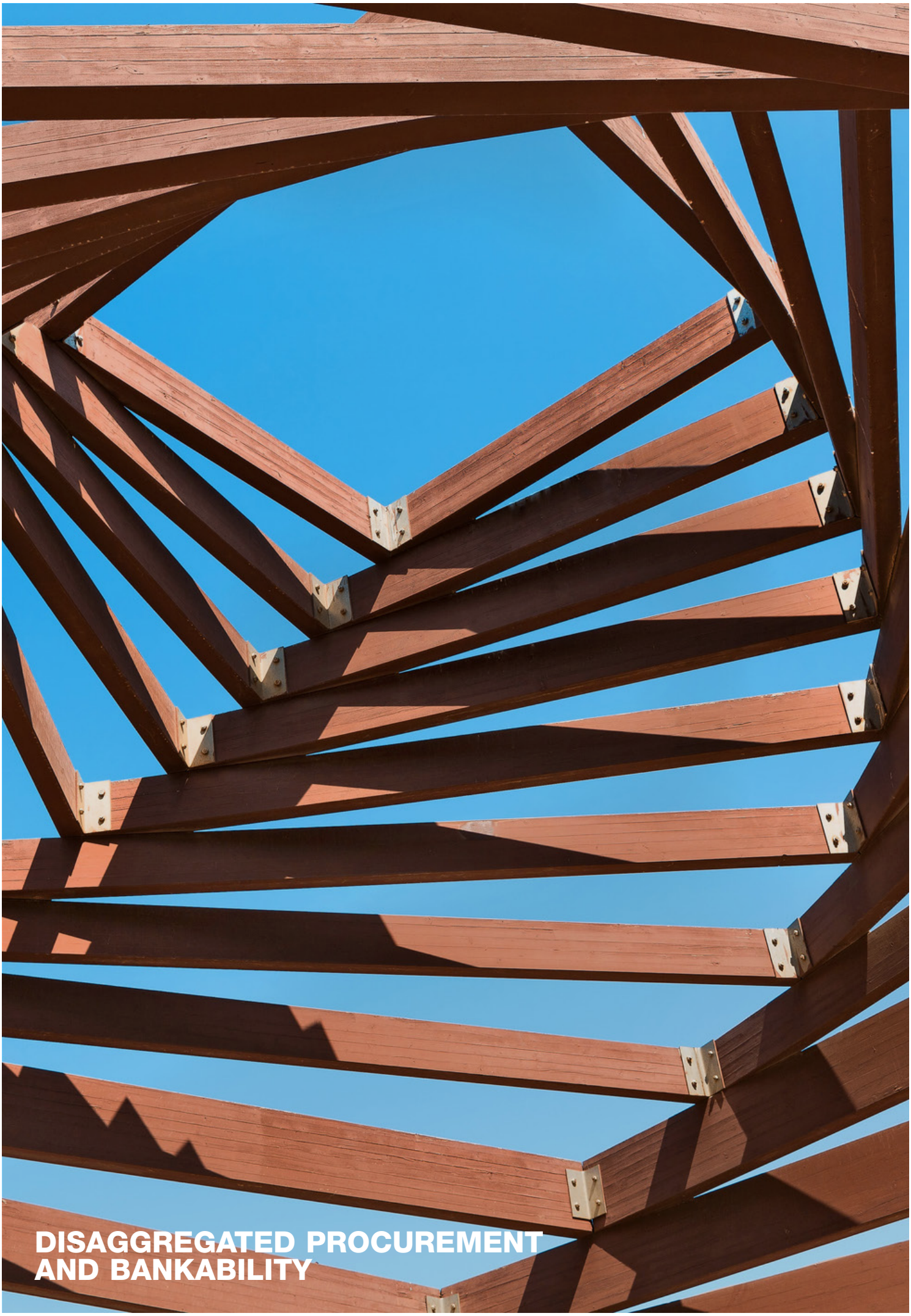
Katrin Schallenberg
Partner
Paris
T: +33 1 4405 2457
E: katrin.schallenberg@cliffordchance.com

Luciano Di Via
Partner
Rome
T: +39 064229 1265
E: luciano.divia@cliffordchance.com

Miguel Odriozola
Partner
Madrid
T: +34 91 590 9460
E: miguel.odriozola@cliffordchance.com

Frans Muller
Associate
Amsterdam
T: +31 20 711 9318
E: frans.muller@cliffordchance.com

Daniel Harrison
Senior PSL
London
T: +44 20 7006 4136
E: daniel.harrison@cliffordchance.com



DISAGGREGATED PROCUREMENT AND BANKABILITY

DISAGGREGATED PROCUREMENT AND BANKABILITY

As major infrastructure projects get larger and more complex, procurement on a full EPC/turnkey basis becomes less viable, and developers, investors and external funders are faced with considering alternative procurement structures in order to deliver projects. These alternative structures can range from other single contract approaches (e.g. an "EPC-lite" model with softer risk allocation than under a typical lump sum EPC contract) to a multi-contract or disaggregated approach.

Disaggregation can bring a number of challenges, but it can also bring advantages. Importantly for infrastructure projects, it can be project financed under the right conditions. In some infrastructure sectors, disaggregation is relatively common already. In others (such as offshore wind) it is becoming increasingly so, as growing lender appetite for the underlying assets converges with improved mitigation packages offered by sponsors and contractors. In this paper, we look at some of the key considerations for lenders when presented with a disaggregated procurement structure.

EPC vs Disaggregation

With limited exceptions, lump sum turnkey/EPC contracting, whereby a single contractor takes full responsibility for designing and constructing the asset (including full management responsibility for the supply chain), has long been the 'standard model' in privately developed infrastructure projects. That is particularly true for deals involving project finance where the relative certainty as to risk allocation, programme and cost is considered to be a critical factor in making a project bankable.

That certainty, of course, comes at a cost, as contractors understandably build in a substantial risk premium to the contract price as well as buffers into their programmes for carrying such a high degree of risk.

Disaggregated contracting provides less certainty – the certainty decreasing as the level of disaggregation increases. It also generates more interface risks (and less comprehensive recourse) than single EPC structures, and this difference is a legitimate subject for analysis by investors and lenders. However, the net extent of additional interface risk is sometimes over-estimated and is in fact capable of substantial mitigation on many projects, as discussed below.

In any event, disaggregated contracting is not just about interface risk, it also brings benefits. For example:

- The reduction of price fluctuation and schedule risk in respect of critical long-lead items (e.g. line-pipe or in-demand turbine units).
- Avoidance of the EPC risk premium, which may have a higher NPV impact than a well-structured contingency or sponsor support package (especially where jointly liable consortium contractors are being asked to wrap unfamiliar technology or counterparty risk).

- Ability to adopt a more flexible ECA funding strategy.

It remains the case, however (despite the various potential advantages of disaggregation), that where project finance is desired, a disaggregated procurement structure is unlikely to be acceptable to lenders in those sectors and markets where EPC models are common and available.

Disaggregation is not new

It is worth noting that disaggregated procurement is not new, nor is it necessarily fatal to obtaining project finance (albeit sometimes with significant completion support). It is already seen quite regularly on deals where:

- the assets are so large and/or complex that no contractor will take full EPC-type risk, or where it would be of little practical benefit even if they did, given the relative sizes of the liabilities involved and the contractor's own balance sheet (e.g. major petrochemical and upstream oil and gas projects, and new nuclear power plants)
- supply-side pressures have allowed key vendors successfully to resist offering full EPC wraps (e.g. the offshore wind sector)
- there are well-resourced and experienced sponsors, who may prefer to manage construction risk more flexibly than an EPC solution allows
- market practice has evolved using a disaggregated model (e.g. on large mining projects and many hydropower projects)
- market and schedule constraints mean that direct long-lead procurement by developers is unavoidable
- tariff competition for developers is so fierce that they perceive success to depend on removing the cost of an EPC wrap (e.g. in some PV solar markets, which benefit from increasingly proven technology and, by relative standards, very low construction risk)
- other valuable security or risk mitigants are available (e.g. real estate development/ development finance where the project is secured against a pre-existing underlying asset of real value).

EPC benefits can be overstated

The benefits of an EPC wrap can also be overstated. For example:

- In sole-sourced/final-stage EPC procurement, the contractor is often able to use negotiating leverage to dilute risk transfer.
- For very high-value projects, the contractor is likely to insist on lower percentage caps and bonds, which may erode the difference between the contractor's risk and return to a point where the efficacy of the EPC wrap is diluted.
- Liability caps can be quite low in some sectors anyway, so the EPC wrap is not absolute financially, even if it is strong on paper.
- The owner bears significant risks in some EPCs, including pipeline or HPP deals where risks such as route selection, ESIA compliance, hydrology or ground conditions may not be susceptible to a full upfront wrap.

The net difference between EPC and disaggregated procurement should be measured realistically.

Challenges of disaggregation

As mentioned above, the key consequences of disaggregation are:

Reduced liability

Contractor liability is notionally lower than in an EPC-scenario as caps on liability and performance security levels will usually be expressed as percentages of individual contract prices (and not overall capital expenditure).

Recourse

Disaggregation can more directly expose developers and funders to 'lesser' contractor covenants and greater insolvency risks than they might experience with EPC contract arrangements. It can also lead to greater complexity in establishing and allocating fault to any particular contractor.

Interface risks

Developers are left managing interface risks, including the risk of contractor-on-contractor delay.

Dealing with disaggregation

A number of potential mitigants are available to help manage the challenges of disaggregation. We discuss these in more detail below.

Step 1: Package reduction

Bringing the number of contracts down allows greater control and management of risks between contractors.

It is sometimes possible to get something like a 'wrap' for the construction piece. A common approach for offshore wind projects has been to have the TSA and then a 'balance of plant' (BOP) contract covering the remaining construction contracts. This 'wrap' is sometimes enhanced for institutional investors and/or lenders by the developer itself acting as the BOP contractor to mitigate interface and recourse issues. Wraps are currently only offered by sponsors in the offshore wind sector rather than the contractor market. Project size makes construction wraps challenging, and projects have managed to cope without them.

Step 2: Stress-testing and contingencies

Lenders will need to understand the potential consequences of disaggregation on their base case model, which should be robustly stress-tested to analyse the impact of, for example:

- worst case delay scenarios
- cascade failures through the supply chain due to lack of wrapped construction
- the rates for delay and performance LDs (and the caps which apply to them) as well as the trigger date for delay LD liability, given that ideally there should not be a gap between commencement of revenue generation and expiry of delay LD liability
- the level of any overall liability caps in the context of worst-case downside scenarios.

It is worth remembering that the risk of 'low' caps in a disaggregated structure can be partly mitigated through analysis that even 100% caps will not protect against worst-case scenarios, as they still comprise only a fraction of the overall capex exposure. As rejection remedies tend not be available or practicable on complex disaggregated

Offshore wind procurement – banking the previously unbankable

Offshore wind is a clear example of a sector where projects have proved to be too large and too complex for an EPC structure.

Until quite recently, the lack of an EPC wrap had contributed to a lack of project finance availability for these projects.

Project finance has now successfully been arranged for a number of large offshore wind farms, notwithstanding the lack of EPC wrap.

In part this is due to a shift in lender appetites for renewable assets, but also due to reasons including:

- Package reduction: Interface risk reduced with a drop from 200+ packages to fewer than 10
- Programming: Programmes focussing on managing and buffering key interfaces
- Personnel: Well-resourced and experienced multi-contract management teams
- Tech risk mitigation: A robust insurance programme and robust LD regimes and performance security in critical package contracts
- Robust downside analysis: Fully stress-tested models looking at multiple possible downside scenarios.

projects (e.g. nuclear, hydro, offshore wind, tunnels), the focus should on agreeing appropriate carve-outs from the caps and the adequacy of caps to cover LD and defects liabilities and/or replacement contractor costs.

When assessing the commercial adequacy of proposed aggregate caps, the liabilities which are carved-out of the cap are arguably every bit as important as the level of the cap itself. Certain critical liabilities will typically fall subject to capping arrangements (e.g. post-completion defects rectification), while others will not (e.g. fines and penalties arising from breaches of law/HSE and indemnities for third party claims for personal injury or property damage).

Step 3: Sensible, nuanced, practical interface procedures

Funders and investors will wish to see strong management and mitigation of interface risks but the focus of this should be on the project and programme management team and strategy rather than contractual provisions *per se*. Examples of practical steps that can be taken include:

- minimising the number of contractual and physical interfaces
- enhancing liaison procedures (e.g. relating to design and schedule coordination and shared access to working and lay down areas)
- prioritising key interface deliverables in the schedule rather than delaying critical path activities just to defer drawdown and flatter the financial model.

Contractual provisions will reflect this priority and provide for dispute consolidation, but risk-sharing across packages is not usual. It is more important to apply a thoughtful approach to the consistency of critical risk allocation across all package contracts (e.g. indemnities, reporting and variation procedures) rather than insist on absolute consistency in all areas.

Step 4: Other mitigants

Other commonly used disaggregation/interface risk mitigants are set out in the box.

In our experience, it is possible to secure most of the mitigants mentioned in the box and in Step 3 above through the consistent and/or complementary drafting of individual package contracts, rather than in a single interface agreement signed by all contractors. Such interface agreements can be:

- very challenging to execute successfully, given the different timing and commercial dynamics of each package
- harmful in some respects, as they can result in the sponsor's overall interface risk position being degraded to the level imposed by the most risk-averse contractor.

Conclusion

Disaggregated procurement brings with it a number of challenges which will be unfamiliar to lenders who are accustomed to the project finance paradigm, i.e. the lump sum fixed price turnkey contract. In markets where turnkey contracts are readily available for infrastructure projects, a switch to any other model is unlikely if debt finance is required (at least without significant completion support). For those assets, however, where the only viable option is a disaggregated procurement model, it may be possible to convince lenders to buy-in nonetheless with a comprehensive and well-structured risk mitigation package.

Other mitigants to disaggregation

In addition to those listed in the main article, the following can also help mitigate interface risk:

- Appropriate use of novation or free-issuance to aggregate and wrap long-lead items in subsequent packages.
- Early introduction of interface obligations into contractor discussions.
- Consistent dispute resolution procedures across all contracts, with sponsor-led consolidation.
- Best in class, project-wide insurance, including robust ALOP/DSU cover.
- Limiting the owner's cross-default liabilities but securing contractor cross-default provisions across different packages for affiliated contractors.
- Early-warning mechanisms and proactive project management procedures in package contracts.
- If the project economics permit, incentive structures (e.g. shared bonus pool).

CONTACTS

David Metzger
Partner
London
T: +44 20 7006 4240
E: david.metzger@cliffordchance.com

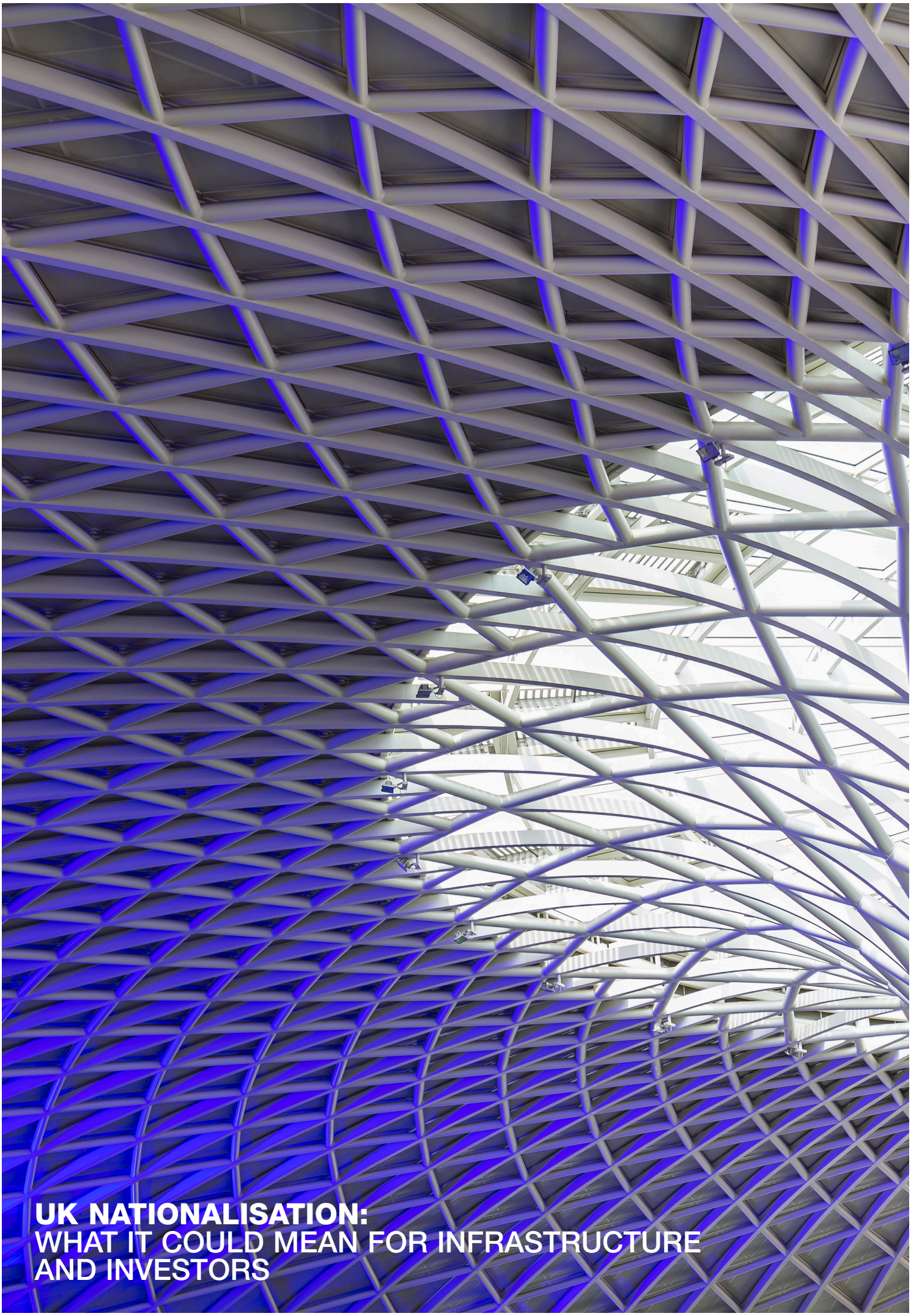
Sandy Hall
Partner
London
T: +44 20 7006 6806
E: sandy.hall@cliffordchance.com

Edward Bretherton
Senior Associate
London
T: +44 20 7006 4856
E: edward.bretherton@cliffordchance.com

Matthew Buchanan
Partner
Singapore
T: +65 6410 2206
E: matthew.buchanan@cliffordchance.com

Inaamul Laher
Head of Construction, MENA
Abu Dhabi
T: +971 2 613 2433
E: inaamul.laher@cliffordchance.com

Tim Steadman
Consultant
Abu Dhabi
T: +971 2 613 2327
E: tim.steadman@cliffordchance.com



UK NATIONALISATION:
WHAT IT COULD MEAN FOR INFRASTRUCTURE AND INVESTORS

UK NATIONALISATION:
WHAT IT COULD MEAN FOR INFRASTRUCTURE AND INVESTORS

Nationalisation is on the agenda in the UK. The Labour Party says if it wins the next general election, it will nationalise the rail companies, water and energy companies, the Royal Mail and possibly private finance initiative (PFI) companies. This is something that many infrastructure companies and investors are taking seriously. Key legal questions are: How would nationalisation work? Who would be affected? And could nationalisation be for less than full market value?

How would nationalisation work?

There have been dozens of nationalisations of UK business in the last seventy years, although these have mostly been nationalisations of businesses in financial difficulty – the emergency nationalisation of an insolvent bank (e.g. Northern Rock), an attempt to consolidate a struggling sector (e.g. British Leyland, the automotive company) or the nationalisation of infrastructure devastated by the Second World War (the railways).

When considering what model a UK government might adopt for the nationalisation of businesses that their shareholders see as successful and profitable, the most relevant precedent is the 1977 Aircraft and Shipbuilding Act. Unlike most of the other examples, it was (at least in part) a nationalisation of a profitable business, against the wishes of many of its shareholders.

If this model were followed, the government would establish one or more new companies as holding vehicles, and provide that, on an appointed date, all equity of the companies to be nationalised would vest in the new holding vehicles.

It may also be necessary to acquire or redeem the debt of companies being nationalised. Much debt would immediately fall due as a result of provisions for acceleration on change of control, nationalisation or expropriation. Debt for this purpose will include public bonds, bank loans and finance leases. Even where the debt could, in theory, remain in place, in practice the government is likely to see this as an unattractive option as it would put the bondholders/lenders in the fortuitous position of having an implicit government guarantee but a coupon considerably higher than a gilt coupon.

However, redeeming the debt may be complicated by the fact that many utility companies have issued long-dated bonds with a fixed or RPI-linked coupon. Early redemption of the bonds typically triggers a "yield protection" payment, generally driven by a Spens formula. The price of redemption could therefore be significantly in excess of the principal and market value.

Labour Party 2017 manifesto excerpt:

"Across the world, countries are taking public utilities back into public ownership. Labour will learn from these experiences and bring key utilities back into public ownership to deliver lower prices, more accountability and a more sustainable economy. We will:

- Bring private rail companies back into public ownership as their franchises expire.
- Regain control of energy supply networks through the alteration of operator licence conditions, and transition to a publicly owned, decentralised energy system.
- Replace our dysfunctional water system with a network of regional publicly-owned water companies.
- Reverse the privatisation of Royal Mail at the earliest opportunity."

A similar issue arises with any hedging arrangements the target companies have entered into. Utility companies often have interest rate, currency and/or RPI swaps hedging their debt. Market movements mean that if the swaps were terminated on a repayment of the debt, in many cases the swaps will be 'out of the money' and therefore expensive to unwind.

If the government left debt or swaps in place then we expect they would become part of the government balance sheet, i.e. adding to the government net debt. We also expect any pension deficit would come on balance sheet. All of this will be expensive. Labour has said it will issue gilts to investors – but that is of course economically the same as raising funds in the gilt market and paying investors in cash.

What compensation would shareholders receive?

Valuing listed securities

Under the 1977 Act, public securities were nationalised for a price equal to the average market price for the six months prior to the first 1974 election. The thinking behind this approach was that the market price of the securities had fallen immediately following the general election, in anticipation of nationalisation, and therefore it would be unfair to assess value by reference to the market price after that date. What happened in practice was that the long gap between the date the price was set and the actual nationalisation – a three-year period of significant geopolitical and economic upheaval – meant that the price set for some companies ended up looking overly generous, and the price for others, unfairly low. Any valuation formula will bear this risk – the earlier the reference period is set, the fairer it will be in terms of avoiding "priced in nationalisation" effects, but the greater the risk that market movements and the differential performance of different companies combine to create pricing anomalies.

Valuing private securities

In the case of private securities, the 1977 Act provided that the value would be set through (closed door) negotiation between shareholders' representatives and government, with a binding tribunal established to hear appeals. The tribunal would apply the same basic rules as applied to listed shares, i.e. looking at the value for the six months prior to the 1974 election, with adjustments. The concept of a behind-closed-doors negotiation fits uneasily in the modern world – but there is no reason why the negotiation could not be in public. An alternative, and more conventional approach, would preserve the concept of valuation by a binding tribunal following pre-determined rules, but for it to apply in all cases, not merely where agreement cannot be reached.

Private Finance Initiative (PFI) companies

In the case of PFI companies, the vast majority of PFI contracts already contain a right for the government unilaterally to terminate a contract prior to its running its full course. However, the termination provisions invariably, specify a methodology and formula for ensuring that the private sector counterparty and its financiers are fully compensated (i.e. no worse off because of the government exercising its unilateral termination right, than if the contract had proceeded as expected), which could mean a hefty and politically unattractive price tag for the government.

An alternative approach would be to prohibit any new PFI contracts and in parallel simply let existing PFI contracts expire with the effluxion of time and, in doing so, make no compensation payment to the private sector.

What legal constraints are there on the price investors receive?

European Convention on Human Rights (ECHR)

The European Convention on Human Rights (ECHR) is an international treaty, ratified by all Council of Europe states. It is not an EU treaty and will not be affected by Brexit. Article 1 of Protocol 1 to the ECHR guarantees the right to the "peaceful enjoyment" of property, though States may interfere with property rights provided it is "in the public interest" to do so and if there is reasonable compensation.

The ECHR was directly incorporated into UK law by the Human Rights Act 1998 (HRA). There are three main pillars to the HRA:

- *First, public authorities must not act in a way that is incompatible with the ECHR.* This means that if an Act of Parliament gives a Minister, tribunal or other body any discretion relating to compensation, then that discretion must be exercised in accordance with Article 1, Protocol 1. Failure to do so would give shareholders a direct right of redress against the government before the UK courts.
- *Second, primary legislation must to the extent possible be given an interpretation which conforms with the principles of the ECHR*. This permits UK courts some latitude in the interpretation of Acts of Parliament, allowing the courts, where there is ambiguity in the language, to "read in" adequate compensation rights to ensure that the UK complies with its ECHR obligations. Again, this potentially gives shareholders a direct right of redress and compensation.
- *Third, if the primary legislation is not sufficiently ambiguous to permit a conforming interpretation, the UK courts may make a "declaration of incompatibility".* A declaration of incompatibility does not affect the validity or continuing operation of an Act of Parliament and does not allow the UK courts to award damages. It is merely a statement that the UK courts consider that Parliament has acted in breach of the UK's international obligations in the ECHR. The matter is then taken back to the political arena, the general expectation being that the government and Parliament will wish to bring UK law into line with the ECHR. But whether or when this might happen in the context of a highly political nationalisation is less clear. Some Labour Party spokespeople have suggested that Labour might nationalise for less than market value. If that was effected in the Act itself then, on the face of it, investors would have no remedy.

EU law

Some politicians and commentators have suggested that the principal legal impediment to nationalisation is EU law, and therefore nationalisation will become materially more straightforward after Brexit. We doubt that this is the case. The obvious point is that EU law did not prevent the nationalisation of Northern Rock in 2008, or the brief nationalisation of the St-Nazaire shipyard by the French Government in 2017, to prevent the shipyard falling into Italian control, among other examples.

In principle, EU law, and the EU state aid rules in particular, can create restrictions on how nationalisation is effected, but only if it involves the grant of government support that a private sector investor would not have secured. In other words, unless the targets of Labour's proposed nationalisation are experiencing business difficulties at the time that they are taken under public ownership (as was the case for Northern Rock), it is not obvious that the state aid rules would come into play.

Even if they did, they would be unlikely to be of assistance to any shareholders seeking to prevent a nationalisation, or to increase the amount of compensation they receive. If anything, the state aid rules may effectively cap that compensation, by preventing payments to business investors that exceed the price that a private sector buyer would have paid.

Bilateral Investment Treaties (BITs)

Some investors potentially benefit from bilateral investment treaties (BITs). BITs are agreements between two states which facilitate private investment by nationals and companies of one state in the other state. This is achieved through providing investors with guarantees that they will not be discriminated against and that their investments will not be expropriated without appropriate compensation. Similar provisions can also be found in some multilateral investment treaties (such as the Energy Charter Treaty and free trade agreements that contain investor dispute mechanisms).

In the UK's Model BIT, the UK may not nationalise or expropriate investments in the UK by nationals or companies of the UK's contracting state partner, except for a "public purpose related to the internal needs" of the UK on a non-discriminatory basis and against prompt, adequate and effective compensation for the "genuine value" of the investment. The Model BIT provides an alternative dispute resolution procedure – the ability to bring a dispute and claim compensation before an international arbitral tribunal, rather than pursuing a claim before the UK courts.

These protections are somewhat broader in scope than those under the ECHR/HRA. In particular, compensation must be "prompt, adequate and effective", rather than merely reasonable. In addition, the nature of the arbitration process means that the UK government has very little ability to circumvent its obligations under an investment treaty – any domestic legislation which purported to override an investment treaty will not relieve the UK government from its treaty obligations.

The UK has BITs with a number of countries, including India, China, Hong Kong, the UAE and Bahrain – all of which are jurisdictions with significant infrastructure investors. The additional protections afforded by investment treaties produce the surprising result that, for example, a Chinese investor in a UK water company which is nationalised could have a stronger claim, substantively and procedurally, than a British pension fund in the same position (which would likely have to rely on the ECHR/HRA).

It would therefore be unsurprising to see some investors who do not have the benefit of an investment treaty moving their investments into entities attracting investment treaty protection – and there are already reports that this is being considered.

Conclusions

Any nationalisation that does not provide full market value compensation, or is otherwise perceived as unfair will almost certainly be challenged:

- through investor-state arbitration proceedings (where investors are established in a country which has an appropriate investment treaty with the UK, whether a BIT or as part of a free trade agreement) and/or
- in the UK courts on the basis of the Human Rights Act (by investors unable to take advantage of investment treaties, including national investors).

In principle, market value compensation could be paid to overseas investors, and below market value compensation to UK investors. However, we would question how politically realistic that is – a plausible outcome is therefore that all investors receive market value compensation. That still leaves plenty of room for unfairness, given the time lag and other complexities. Disputes would therefore still be likely, but they would be disputes on much more favourable ground for the government than trying to defend nationalisation for less than market value before international arbitration tribunals.

For more detail on this subject, see our Thought Leadership piece "*UK nationalisation: the law and the cost*".

CONTACTS

Dan Neidle
Partner
T: +44 20 7006 8811
E: dan.neidle@cliffordchance.com

Jessica Gladstone
Partner
Public International Law
T: +44 20 7006 5953
E: jessica.gladstone@cliffordchance.com

Phillip Souta
Head of UK Public Policy
T: +44 20 7006 1097
E: phillip.souta@cliffordchance.com

Elizabeth Morony
Partner
Litigation
T: +44 20 7006 8128
E: elizabeth.morony@cliffordchance.com

Janet Whittaker
Partner
International Disputes and Arbitration
T: +44 20 7006 2821
E: janet.whittaker@cliffordchance.com

Paul Carrington
Partner
Asset Finance/Transport
T: +44 20 7006 8124
E: paul.carrington@cliffordchance.com

Stephen Curtis
Partner
Infrastructure Finance
T: +44 20 7006 2281
E: steve.curtis@cliffordchance.com

Michael Bates
Regional Managing Partner, UK
Infrastructure Finance
T: +44 20 7006 2783
E: michael.bates@cliffordchance.com

James Boswell
Partner
Infrastructure Finance
T: +44 20 7006 8179
E: james.boswell@cliffordchance.com

Amy Mahon
Partner
Infrastructure M&A
T: +44 20 7006 5551
E: amy.mahon@cliffordchance.com

Michael Pearson
Partner
Infrastructure/PFI
T: +44 20 7006 4753
E: michael.pearson@cliffordchance.com

Audley Sheppard QC
Partner
International Disputes and Arbitration
T: +44 20 7006 8723
E: audley.sheppard@cliffordchance.com

CHINA'S BELT AND ROAD INITIATIVE:
THE INFRASTRUCTURE CHALLENGES

CHINA'S BELT AND ROAD INITIATIVE:
THE INFRASTRUCTURE CHALLENGES

China's Belt and Road Initiative (BRI) unveiled by President XI Jinping in 2013, is one of the most ambitious development projects in history. It aims to boost global trade between Asia, Europe and Africa and create vibrant economies along its route, which covers 74 countries. Five years on from its launch, our experts assess the opportunities and challenges that lie ahead.

BRI is notable not only in terms of its scale, geographical reach and the political will behind it, but also for the lack of any roadmap. This has led to criticism that it is vague, lacks clear direction and its success is difficult to predict. What is clear is that the focus of the initial phase of BRI is firmly on infrastructure, particularly transportation, energy and communications.

The majority of BRI projects that have been completed to date, or that are under construction, are in the transportation sector, mainly ports and railways. These include:

- China to London Railway Project
- Gwadar Port, Pakistan
- Jakarta–Bandung High-Speed Train
- China–Laos Railway
- Ethiopia–Djibouti Railway
- China–Europe Freight Train Services, connecting 32 cities in 12 European countries.

According to the Ministry of Commerce (MOFCOM), China signed USD144.32 billion worth of construction contracts with 61 countries along the belt and road routes in 2017. This compares with USD126.03 billion and USD92.40 billion in 2016 and 2015 respectively.

Where is the money coming from?

By the end of 2016, China's two state policy banks, China Development Bank (CDB) and The Export-Import Bank of China (CEXIM) had extended USD200 billion in loans to BRI projects, whereas China's three stated-owned commercial banks (the Industrial and Commercial Bank of China, Bank of China and China Construction Bank) had extended USD250 billion in total. BRI, if fully realised, is likely to cost some trillions of US dollars over the next decade. Popular estimates for Chinese investments under BRI range from USD1 trillion to USD8 trillion, but there does not appear to be any publicly available official estimate. In any case, even based on the lowest estimate of USD1 trillion, China is unlikely to be able to finance the capital costs of BRI projects on its own.

A number of programmes have been developed to either invest in, or lend money to, BRI infrastructure projects. These include:

- a USD124 billion pledge to the Silk Road Fund

- China is empowering numerous smaller development funds for various regions, which total over USD76 billion
- CDB and CEXIM are setting up special lending schemes worth RMB150 billion and RMB130 billion to support the implementation of BRI.

Issues and challenges

There are a number of common challenges facing BRI projects:

- **Political risks**: Many countries on the Belt and Road routes are subject to political upheaval, which can have a huge impact on the development and success of infrastructure projects. A number of Chinese infrastructure developments in Sri Lanka, for example, have not gone according to plan owing to the intractability of local politics. China Export & Credit Insurance Corporation (often known as Sinosure) plays a key role in BRI, providing much-needed political and commercial risk insurance cover to investors and financiers on Belt and Road projects.

  According to Sinosure, the total insured amount under Sinosure insurance policies attributable to exports to and/or investments made in Belt and Road countries amounted to nearly USD510 billion by the end of Q3 of 2017, with the aggregate amount of claims paid approximately USD2 billion. The Sinosure insurance policy is a single bank product, and is not designed for syndicated financing deals. We believe that, in the long run, given the wide usage of Sinosure insurance products on BRI deals and the desire to mobilise private capital and international funding to jointly support BRI projects, the Sinosure insurance policy will need to be reformed and developed in line with some of its overseas counterparts, such as UK Export Finance or Japan's JBIC, in order to be more easily acceptable to international financiers.
- **Legal and regulatory issues**: The legal system and local law in some Belt and Road countries have not been tested for foreign investments or large-scale infrastructure projects before. The USD5 billion Jakarta–Bandung high-speed rail line is currently on hold owing to land ownership issues affecting nearly 40% of the land. The project began in January 2016, and was expected to be completed by 2019. The current target for completion is now 2024. Another example is the USD5.2 billion China–Thailand railway project, which is currently facing delays owing to issues with environmental approvals in Bangkok. The same project previously suffered delays related to investment sharing and development rights.
- **Stranded assets**: Certain forms of security customary for project finance transactions (e.g. account security, security over contractual rights, floating charge) may not have an equivalent under PRC security law. Importantly, most large-scale onshore Chinese projects are carried out by state-owned enterprises (SOEs), and Chinese financiers are used to seeking recourse directly from SOEs (instead of the project itself). Hence, project finance is not a common form of financing in China, and Chinese banks do not have as much experience in analysing and allocating risks on infrastructure projects when compared with international commercial banks and multilateral development banks. The lack of expertise in this regard may result in deals with less robust commercial and financing terms, which may, in turn, give rise to issues further down the line, resulting in stranded project assets. Such a domino effect can be disastrous. The sustainability of the Belt and Road hinges upon the attractiveness and recyclability of project capital, which is particularly important given the huge capital needed to achieve the BRI vision.

It is clear that China cannot, on its own, finance the BRI or bring it to success. Whilst the BRI has been much criticised for benefiting only the Chinese, that applied to the embryonic stages of BRI and more opportunities should naturally and logically open up for foreign investors in the years to come, particularly when there are more successful BRI stories to provide a track record.

The role of private investment funds

The scale of the BRI means that its funding will need international cooperation and innovative solutions. In private funds, there has been a noticeable increase in fund formation activity where funds' investment objectives are linked to BRI. Examples include: Silk Road Fund, Sino-Central and Eastern European Fund, China-Central and Eastern European Fund, China-ASEAN Investment Cooperation Fund, China-ASEAN Maritime Cooperation Fund, China UAE Joint Investment Fund, China-Eurasia Economic Cooperation Fund, China-Africa Development Fund, and the China Latin America Industrial Cooperation Investment Fund.

Here are some of our observations:

1. Current BRI initiatives are mostly being led by Chinese state-owned banks, policy banks and governmental bodies. Relatively speaking, it appears that private capital is less enthusiastic about investing in BRI-focused funds, and is very much adopting a "wait and see" approach at this stage. This might be due to a higher risk premium being required to encourage private capital to invest in BRI countries, many of which are generally considered to be sub-investment grade.
2. In terms of structure, although many of these funds are structured as traditional closed-ended blind pool private funds, it is quite common for transactions to be club deals with significant capital commitments from each co-sponsor. Shareholders of the general partner/manager (Manager) of the fund are often also investors (and sometimes the only investors) in the fund. Increasingly, we have seen Managers established as joint ventures between Chinese state-owned/policy banks or Chinese-backed investment cooperation funds (Chinese SOEs) and foreign investors/sponsors.
3. Aside from blind pool funds, we have also seen a marked increase in the formation of single asset funds which invest in pre-identified BRI-related portfolio assets, with a limited number of investors. There seems to be a wide belief that attaching the "BRI" label will more likely secure funding from Chinese SOEs and backing from the relevant Chinese regulatory bodies.

There is undoubtedly significant interest among international private fund managers in BRI, and provided that the government-led projects prove successful, we expect this interest will grow.

Attracting private capital

BRI will no doubt present many opportunities, but financing currently remains a challenge. While existing Chinese government-backed banks and investment cooperation funds (including Asian Infrastructure Investment Bank and the Silk Road Fund) have extended funding to BRI investments, the amount remains very small relative to funding requirements.

According to the Asian Development Bank, government reforms could only bridge up to 40 per cent of the financing gap, while the remainder needs to be filled by the private sector. Filling this funding gap will require more private international capital; mere government/state investment is not sufficient. China's increased measures to tackle shadow banking (including the recent ban on China investment funds from making loan investments) could further increase this funding gap.

However, in order to attract the necessary private international capital, changes are needed in the way in which international private investors perceive risks in many of the emerging markets in the BRI countries. There also needs to be transparency on costs and returns. Fund economics are important – beating the hurdle and ensuring that there is the potential for a decent distribution of carry is key to the success of an investment fund and hereby attracting more private capital.

International collaboration and good corporate governance

We expect to see more collaboration between Chinese SOEs and foreign investors/ sponsors to capitalise on the potential and opportunities arising from BRI. Through cooperation arrangements with Chinese SOEs, foreign parties can gain access to "Chinese elements" (for example, financing from Chinese institutions; cooperation opportunities with Chinese equipment manufacturing, engineering, procurement, construction (EPC) contracting, operations and maintenance services and other types of enterprises; potential Chinese buyers in a portfolio sale, etc) while Chinese SOEs can gain access to the technology and/or knowledge of local conditions which the foreign parties can often offer. Cultivating a good corporate governance culture is vital to this collaboration, and will make BRI investments more palatable.

What happens if there are problems with projects?

BRI encompasses countries and territories with significant political and economic risks, and the types of projects (in particular, their large scale and the deep involvement of government or state-owned enterprises of the host state) further enhance the risks.

Chinese companies are giving increasing thought as to how best to protect their interests as BRI gathers pace. Previously, Chinese companies were mainly concerned with defending potential claims from foreign investors in relation to inbound investments. However, the increase in the level and scope of outbound investment (especially in light of BRI) has led Chinese companies to consider more carefully the various dispute resolution alternatives as they make their investments.

Chinese negotiators are now more savvy about issues such as the relative merits of arbitration compared with litigation and the choice of arbitral seats. In addition, Chinese courts are losing some of their traditional reserve about enforcing foreign judgments, and there are policy initiatives afoot to ease the recognition and enforcement of court decisions across Belt and Road countries. It may take some years for disputes to play out, but Chinese government and companies are putting in place the mechanisms necessary to smooth the path for cross-border dispute resolution in Belt and Road projects.

CONTACTS

Nicholas Wong
Partner
Singapore
T: +65 6410 2218
E: nicholas.wong@cliffordchance.com

Mark Shipman
Partner
Hong Kong
T: +852 2825 8992
E: mark.shipman@cliffordchance.com

Terence Foo
Co-Managing Partner
Beijing
T: +86 10 6535 2299
E: terence.foo@cliffordchance.com

Maggie Lo
Partner
Hong Kong
T: +852 2826 3568
E: maggie.lo@cliffordchance.com

Dauwood Malik
Partner
Hong Kong
T: +852 2826 3485
E: dauwood.malik@cliffordchance.com

Cameron Hassall
Partner
Hong Kong
T: +852 2825 8902
E: cameron.hassall@cliffordchance.com

Paul Sandosham
Partner
Singapore
T: +65 6661 2055
E: paul.sandosham@cliffordchance.com

Maggie Zhao
Partner
London
T: +44 20 7006 2939
E: maggie.zhao@cliffordchance.com

Huw Jenkins
Consultant
London
T: +44 20 7006 1392
E: huw.jenkins@cliffordchance.com

Vicky Ma
Consultant
Hong Kong
T: +852 2825 8995
E: vicky.ma@cliffordchance.com

Viola Lui
Consultant
Hong Kong
T: +852 2825 8842
E: viola.lui@cliffordchance.com

Shi Lei
Consultant
Hong Kong
T: +852 2826 3547
E: lei.shi@cliffordchance.com

BILATERAL INVESTMENT TREATIES:
STILL VALUE FOR MONEY

BILATERAL INVESTMENT TREATIES:
STILL VALUE FOR MONEY

The March 2018 judgment of the Court of Justice of the European Union in the case of *Slovak Republic v Achmea BV* held that an arbitration clause in an intra-EU bilateral investment treaty (BIT) was incompatible with EU law. This has cast some considerable doubt over the utility of intra-EU BITs as a means of protecting European investors' rights when investing in other EU Member States.

However, the utility for investors of BITs that are not between EU Member States remains undiminished – as demonstrated by the steady flow of Awards rendered in investors' favour.

Examples from the past eighteen months include successful claims:

- for US$140 million by Eiser Infrastructure Limited and Energía Solar Luxembourg S.à r.l. against Spain for breach of the fair & equitable treatment and legitimate expectations standards (ICSID Case No. ARB/13/36, Award of 4 May 2017); and
- for US$320 million by Teinver S.A., Transportes de Cercanías S.A. and Autobuses Urbanos del Sur S.A. against Argentina for the unlawful expropriation and breach of the fair & equitable treatment standard regarding investments in Argentinean airlines (ICSID Case No. ARB/09/1, Award of 21 July 2017);
- for US$39 million by Caratube International Oil Company against Kazakhstan for the unlawful expropriation of rights under an oil exploration contract (ICSID Case No. ARB/13/13, Award of 27 September 2017);
- for US$324 million by Koch Minerals against Venezuela for the unlawful expropriation of fertilizer plants (ICSID Case No. ARB/11/19, Award of 19 October 2017);
- for US$18 million by Bear Creek Mining Corporation against Peru for the unlawful expropriation of rights to a silver mine (ICSID Case No. ARB/14/21, Award of 30 November 2017).

Politically-motivated threatened expropriations also continue to feature in the headlines. In July 2017, Tanzania enacted laws asserting "permanent sovereignty" over its natural resources and drastically amended its mining code. In March 2018, the Democratic Republic of Congo revised its mining code, doubling the State's equity interest, imposing local shareholder requirements, increasing royalty rates and imposing a 'super profits' tax. In South Africa, the President of the African National Congress, Cyril Ramaphosa, recently announced that the ANC will support amending the South African constitution to "explicitly" expropriate land without compensation. In the UK, the Labour Party has signalled its intent to implement a nationalisation policy across several strategic sectors (including railways, energy, water and the postal service), which has unsettled many foreign (including non-EU) investors in the UK.

This tendency towards nationalistic or protectionist policies shows no signs of abating. To the extent that BITs that are not between EU Member States remain available to investors, they therefore still provide valuable protections against interference with investments when host governments take steps to implement such policies.

This briefing provides a quick 'refresher course' on BITs, including their principal terms, the scope of the protections that they can offer, and how to lock in the benefit of those protections.

BIT 'REFRESHER COURSE'

What are BITs?

BITs are short agreements – often of no more than ten or so pages – entered into between two States. BITs provide for the mutual promotion and protection of "investments" made by "investors" of each State in the other State.

What is an "investment"?

"Investments" are normally defined as "every kind of asset". These therefore include:

- equity interests in locally-incorporated companies
- rights under contracts
- physical assets
- loans made by a foreign lender to a borrower in the Host State in question (including in the form of a shareholder or intra-group loan).

What standards of protection do "investments" benefit from?

BITs prescribe certain minimum standards of protection, which are intended to ensure the promotion and protection of investments. The formulation of these standards varies from BIT to BIT, and their meaning is undergoing a constant process of development in international case law. However, whilst each BIT is individually negotiated and must therefore be read carefully, most BITs generally include several, if not all, of the following standards of protection:

- *No unlawful expropriation* – the Host State must not expropriate investments of investors from the other contracting State unless it is done for a public purpose, is non-discriminatory, is in accordance with the due process of law, and prompt, adequate and effective compensation is paid.
- *Fair and equitable treatment* – the Host State must not harm the investment by unreasonable or arbitrary conduct, or act in a way which is not transparent or contrary to the reasonable expectations of the investor.
- *Full protection and security* – the Host State must physically protect the investment.
- *Non-discrimination* – the Host State must not act in a way that discriminates against investments of investors of the other contracting State.

- *National treatment* – the Host State must grant investors the same treatment that is given to its nationals.
- *'Most-Favoured-Nation' treatment* – the investor is entitled to treatment as favourable as that given to nationals of any third countries.
- *Compliance with obligations* – some BITs require the Host State to comply with all its obligations in relation to the investment, which may include all its contractual obligations.

As these standards are prescribed by treaty, they are interpreted in accordance with international law, unless the BIT provides otherwise.

What if the standards of protection are breached?

The breach of any of these minimum standards of protection may entitle a qualifying investor to compensation (being restitution and/or damages).

BITs often require "prompt, adequate and effective compensation" to be made. Monetary compensation is generally assessed to be the "fair market value" of the investment, i.e. what a willing buyer would pay a willing seller.

Where the affected property is a going concern, such as a business, tribunals often determine the net present value of the likely future income stream.

Who can benefit from these standards of protection?

An investor can normally only take advantage of the protections afforded under a BIT – and bring a claim against the Host State – if they are either:

- an individual with the nationality of a country which has entered into a BIT with the Host State in question
- an entity incorporated in a country which has entered into a BIT with the Host State in question, or
- (in some BITs) an entity which is incorporated in the Host State in question, but which is controlled by nationals of the other State.

Forum for claims under a BIT

Provided an investor meets the above criteria and can demonstrate that they have an investment in the Host State, BITs allow them to refer claims against the Host State for breaches of the standard of the protection to international arbitration.

This frees the investor from having to bring proceedings in the local courts (which may, potentially, be partial to the Host State's position). No separate arbitration agreement need be negotiated between the qualifying investor and the Host State before international arbitration proceedings can be commenced. This is because the Host State's consent to refer disputes to international arbitration is given when the Host State enters into the BIT.

The qualifying investor will normally be able to choose between several different rules and fora. Typically, these include: (i) the rules of the International Centre for the Settlement of Investment Disputes (ICSID); (ii) the rules of arbitration of the United Nations Commission on International Trade Law (UNCITRAL); and (iii) the rules of one of the arbitral institutions such as the International Chamber of Commerce (ICC) or the Stockholm Chamber of Commerce (SCC).

Most BITs require a notice of dispute to be served, and then prescribe a "cooling-off period" of between three and nine months, during which the parties are encouraged to pursue settlement negotiations. If no amicable settlement can be reached, then a formal Request for Arbitration can be served under the applicable arbitration rules.

How many BITs are there?

Globally, over 2,900 BITs have been entered into. Of these, just over 2,500 are in force. There is therefore considerable scope for "investments" to be made into a Host State through a fund-flow structure such as to attract the benefits of a BIT that that Host State has been entered into.

A list of BITs can be found on a database maintained by the United Nations Conference on Trade and Development (UNCTAD) at http://investmentpolicyhub.unctad.org/IIA – however, it is always prudent to check with the respective Governments to ensure that the BIT that has been identified is in force (or to see if a BIT that is not yet listed has come into force).

Conclusions

Where there is a risk of political influence being exercised by the government of the Host State, then, where possible, investors should attempt to structure their investments through a company in a jurisdiction that has a BIT with the Host State in which the investment is being made (and, in the case of an investment in an EU Member State, through a company incorporated in a non-EU jurisdiction).

This simple step can provide significant value for the money. For modest advisory fees, financially significant investments can be given considerable extra protection, which in turn gives significant comfort to investors, their shareholders and lending banks.

CONTACTS

Audley Sheppard QC
Partner
London
T: +44 20 7006 8723
E: audley.sheppard@cliffordchance.com

James Dingley
Senior Associate
London
T: +44 20 7006 2431
E: james.dingley@cliffordchance.com

Jessica Gladstone
Partner
London
T: +44 20 7006 5953
E: jessica.gladstone@cliffordchance.com

Moritz Keller
Partner
Frankfurt
T: +49 69 7199 1460
E: moritz.keller@cliffordchance.com

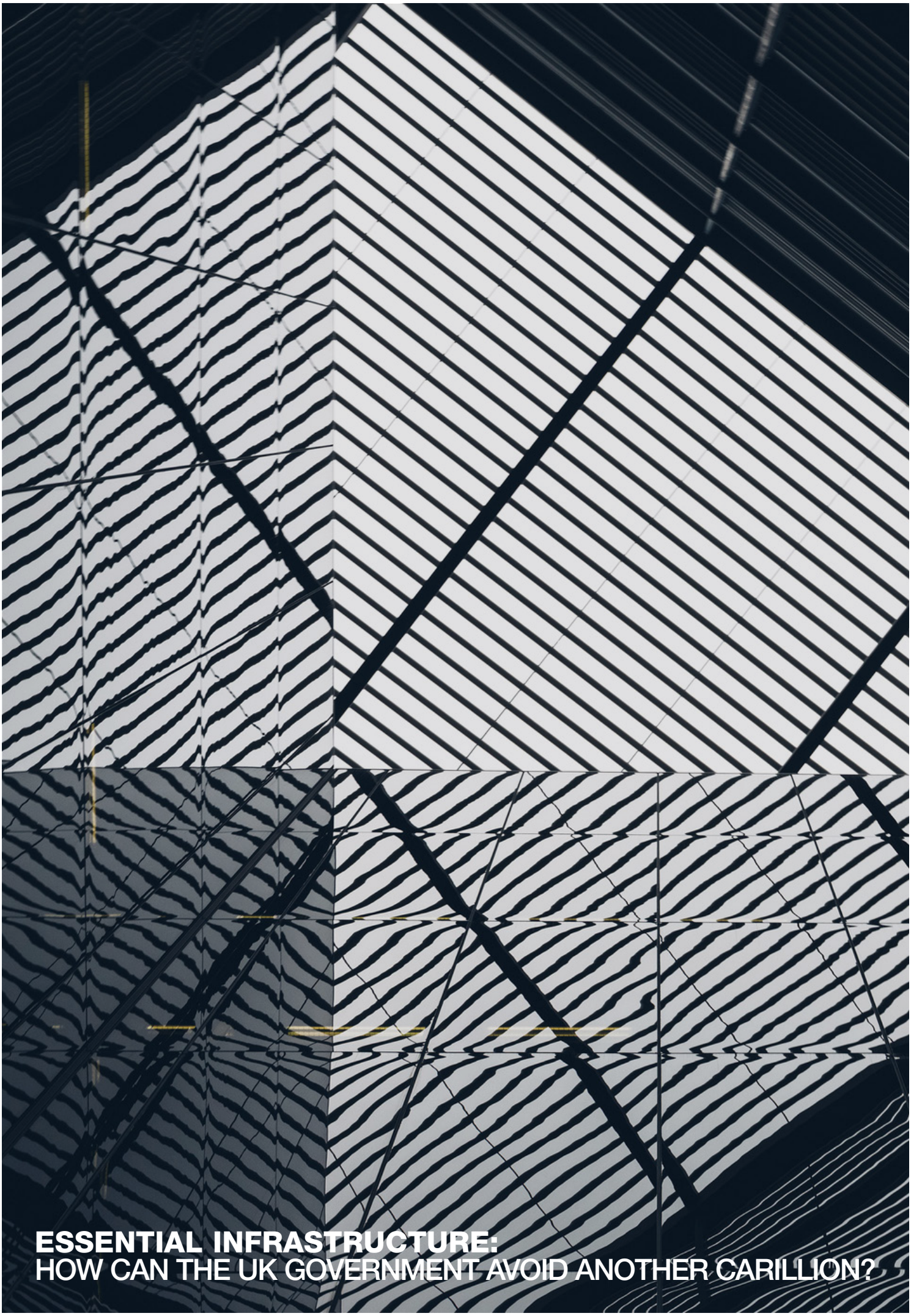
Sam Luttrell
Partner
Perth
T: +61 89 2625 564
E: sam.luttrell@cliffordchance.com

Ignacio Suarez Anzorena
Partner
Washington D.C.
T: +1 202 912 5185
E: ignacio.suarezanzorena@cliffordchance.com

Romesh Weeramantry
Counsel
Singapore
T: +65 6410 2257
E: romesh.weeramantry@cliffordchance.com

Janet Whittaker
Partner
Washington D.C.
T: +1 202 912 5444
E: janet.whittaker@cliffordchance.com

Louis-Alexis Bret
Juriste
Paris
T: +33 1 4405 5253
E: louisalexis.bret@cliffordchance.com



ESSENTIAL INFRASTRUCTURE:
HOW CAN THE UK GOVERNMENT AVOID ANOTHER CARILLION?

ESSENTIAL INFRASTRUCTURE:
HOW CAN THE UK GOVERNMENT AVOID ANOTHER CARILLION?

Carillion's collapse has been an important, yet costly, test of the UK Government's outsourcing and contracting resilience. Carillion was just one of the UK Government's strategically important suppliers, but there are other, larger, suppliers upon whom the UK Government is even more reliant. At a time of uncertainty over Brexit, Carillion has provided an opportunity for the UK Government to learn and improve.

Outsourcing – what are the risks?

Outsourcing enables the UK Government to access resources in the private sector which, if properly overseen and controlled, deliver greater value for money. The task of maintaining or running essential societal assets has passed to private sector providers who have to compete hard on price. While this has the laudable aim of reducing costs to tax payers, it also means that private providers are operating with thin margins and are less able to avoid insolvency if the heat of competition has driven them to under-price the contract.

While the UK Government can outsource the service, it cannot outsource responsibility. If margins are so thin that the private sector provider collapses, the Government may have little choice but to intervene and this is paid for by tax payers. This creates a dilemma for the Government – if it picks up the tab for a collapse, it is underwriting the low pricing of the private sector provider; if the private sector provider does not collapse, the rewards are retained by its shareholders.

The collapse of Carillion – what happened?

On 15 January 2018, Carillion entered compulsory liquidation with just £29m in cash and more than £1.5bn of debt. Up until the point of collapse it had been the UK Government's sixth largest supplier, employing 18,000 people and holding 420 public sector contracts including for essential infrastructure (building hospitals, schools, roads and the High Speed 2 rail line) as well as other public service tasks (catering for 200 schools and facilities management in prisons and on defence bases).

The UK Government was prepared for the collapse. The Cabinet Office monitored Carillion closely following an initial profit warning in July 2017, and following acute liquidity requirements at the turn of the year, Carillion went into liquidation but in a manner that ensured the majority of public services would not be disrupted. This was achieved by financing a 'trading liquidation' so that public sector customers continued to receive services through Carillion while they found alternative suppliers.

"Any project, whether it is a PPP or a traditionally procured project, should be undertaken only if it creates value for money."

—PHILIPPE BURGER AND IAN HAWKESWORTH
OECD Journal on Budgeting

Timeline of events

10 July 2017: first profit warning

20 July 2017: UK Government began contingency planning

29 September 2017: second profit warning

17 November 2017: Carillion announces expected breach of banking covenants

31 December 2017: Carillion formally requests UK Government support (cash injection, deferment of taxes, immunity from regulatory investigations and assistance with pension liabilities)

3 January 2018: Financial Conduct Authority announces investigation and Cabinet Office prepare an options paper (including 'trading insolvency')

5-10 January 2018: series of meetings between UK Government and Carillion and contingency planning

12 January 2018: Prime Minister approves trading insolvency option

14 January 2018: UK Government tells Carillion it will not provide support

15 January 2018: Carillion applies to the High Court for liquidation

What is needed is a mechanism that makes the delivery of UK essential infrastructure delivery more resilient, without necessarily increasing returns to shareholders – some sort of "lifeboat" to ensure that hospitals are not left half-built, that sub-contractors are paid and that tax payers do not carry the can.

Counting the costs

All of Carillion's public sector contracts have now been terminated or transferred to an alternative supplier. The current net costs of the liquidation proceedings (£148m) and the special managers (£9m), appointed by the High Court to assist with liquidation, are borne by tax payers. The total costs to the tax payer are likely to be considerably higher when four internal inquiries and investigations by the Financial Reporting Council, the Financial Conduct Authority, the Pensions Regulator and the Official Receiver are taken into account, together with the premiums (thought to be around an extra 20 per cent) paid by public sector customers that continued to use Carillion as a 'trading insolvency.'

There is also the cost to the wider economy. As of October 2018, 2,404 (15 per cent) of Carillion's pre-liquidation workforce have been made redundant. The figure is expected to rise as the activities of the 'trading liquidation' are wound down. Redundancies are also expected further down the supply chain and the 30,000 suppliers, sub-contractors or other creditors (including pensions and the tax man) owed money by Carillion at the point of liquidation will be left with unrecoverable debts/claims.

While the UK Government has attempted to stabilise what was an already fragile supply chain by coordinating lending facilities of up to £1bn, there have been reports of businesses failing as a result of the collapse and 27,000 members of Carillion's defined benefit pension schemes face reduced pension payments.

The impact on the UK Government's approach to outsourcing

It appears unlikely that the UK Government will reduce the extent of outsourcing. In an address to the Reform think tank on 25 June 2018, David Lidington, Minister for the Cabinet Office, announced a package of measures designed to tighten up existing processes and mitigate the risk of another collapse. The UK Government will impose enhanced requirements for existing suppliers to build their own resilience (e.g. developing living wills), implement new laws and guidelines so that procurement processes diversify markets and move away from price-focused competitions (e.g. disaggregating contracts and evaluating social values), increasing transparency so that tax payers can track outcomes and providing government contract managers with high quality training. But ultimately, the Minister and the UK Government have been keen to stress unwavering support for the private sector's role in delivering public services and essential infrastructure.

"Whether it is running our hospitals; operating call centres; building our railways; or supporting our Armed Forces – the private sector has a vital role to play in delivering public services, something which this government will never cease to champion."

—**DAVID LIDINGTON, Minister for the Cabinet Office,** 25 June 2018

Building greater resilience in procuring essential infrastructure

Whatever improvements the UK Government may make in its procurement and management of external suppliers – and it has made notable progress in developing commercial capability across the Civil Service through the establishment of the Government Commercial Function, the Government Commercial Office and the Infrastructure and Projects Authority (IPA) – there is an inherent risk in the pursuit of value for money that a private sector provider may collapse. We think that the UK Government should embrace the potential for future collapses and plan accordingly to ensure that tax payers and the supply chain do not bear the financial brunt and that the public do not face the loss of essential infrastructure.

Based on concepts borrowed from the banking, travel and rail sectors, we set out potential structures the UK Government could implement when procuring services from essential infrastructure providers (EIPs).

Dedicated Essential Infrastructure Companies (DEICs)

Each time an EIP successfully tenders for essential infrastructure work, it will be required to contract with the UK Government using a separate legal entity – a Dedicated Essential Infrastructure Company (DEIC) – that is ring-fenced from the rest of its group. The DEIC will be 100 per cent owned by the EIP and will be constrained by its constitution and contractual agreement with the UK Government procuring entity from undertaking anything other than the provision of UK Government essential infrastructure. The EIP is obliged to use the same DEIC for each contract with the UK Government for essential infrastructure.

As the DEIC will be a straightforward sole-purpose company, this will enable UK Government procuring entities to be assured that equivalent assessments of creditworthiness and robustness have been undertaken in relation to every significant commitment of the DEIC. To the extent that the EIP wishes to undertake more risky or less "regulated" contracts with the private sector, that must be done through other entities in the EIP's group. There is no reason why Government contracts should be used to underpin other elements of business.

The UK Government procuring entity should also have confidence in the DEIC's governance processes through, for example, independent directors and requiring the production of clear accounts setting out the DEIC's capitalisation.

In the same way as ring-fenced banks share service companies with non-ring-fenced entities within the same group, the DEIC should demonstrate to its UK Government procuring entity that it will have available to it (even following the insolvency of the rest of the EIP's group) the wherewithal to deliver essential corporate functions. These services have to be provided on arm's-length terms and so, if the provision of such service support was jeopardised by the insolvency of the rest of the EIP's group, it should be possible to obtain similar support on similar arm's-length terms.

EIP oversight function

The UK Government could manage its relationship with each DEIC at a central level. This could be through Cabinet Office's existing Strategic Supplier scheme or another unit (for example the IPA). Both the EIP and its DEIC will have contractual obligations to the procuring entity, monitored by that unit, to create and maintain 'living wills' – in effect recovery and resolution plans – and the unit will have contractual rights of early intervention and stabilisation measures over the DEIC.

But this only goes so far; the UK Government procuring entity would have, in each case, to assess the creditworthiness of that individual entity. To some extent that can be assessed on a DEIC-by-DEIC basis, but maintaining sufficient capital on an individual project or even EIP-by-EIP basis is inefficient, as is increased performance security such as the 100% bonded projects common in the US. Ultimately the cost of this capitalisation or greater performance security is passed back to the UK Government through the outsourcing contract, so the UK Government should at least be able to insist that it is done in the most efficient way possible.

Essential Infrastructure Protection Trust (EIPT)

One solution to this would be for the UK Government to create a trust funded through contributions by DEICs paid as a small levy on amounts payable to the DEIC under its essential infrastructure contracts. In addition, an insurance policy and a credit facility would be arranged to provide additional liquidity to the EIPT.

The EIPT would make facilities available to each DEIC, drawable in the event that the DEIC is unable to financially deliver its outsourced obligations.

"Government needs to understand the financial health and sustainability of its major suppliers, and avoid creating relationships with those which are already weakened."

—**AMYAS MORSE,**
Head of the NAO, 7 June 2018

The DEIC would be obliged to repay sums drawn from the EIPT. This reimbursement obligation would be guaranteed by a holding company of the DEIC supported by fixed and floating charges including a share charge – allowing the EIPT to call under the guarantee and enforce the share charge or appoint an administrator.

The amount of this "levy" would correspond to the arm's length cost of assuming risk of failure to avoid state aid concerns. This is, in effect, the residual risk that the Government takes each time it contracts to outsource essential infrastructure: that the EIP will fail and the Government will have to pay (again) for the provision of that essential infrastructure.

In the event of a failure of an EIP, the DEIC could be kept out of insolvency by virtue of:

- All of its contractual obligations containing an obligation not to apply for the winding up or administration of the essential infrastructure provider without the consent of the UK Government.
- The EIPT having a step-in right enabling it to step in and meet the obligations of the failing DEIC so ensuring that employees and sub-contractors will continue to be paid and, in the event that any service company has failed, sourcing other services so that corporate continuation can be achieved.
- The EIPT would have a claim against the DEIC for any costs incurred.

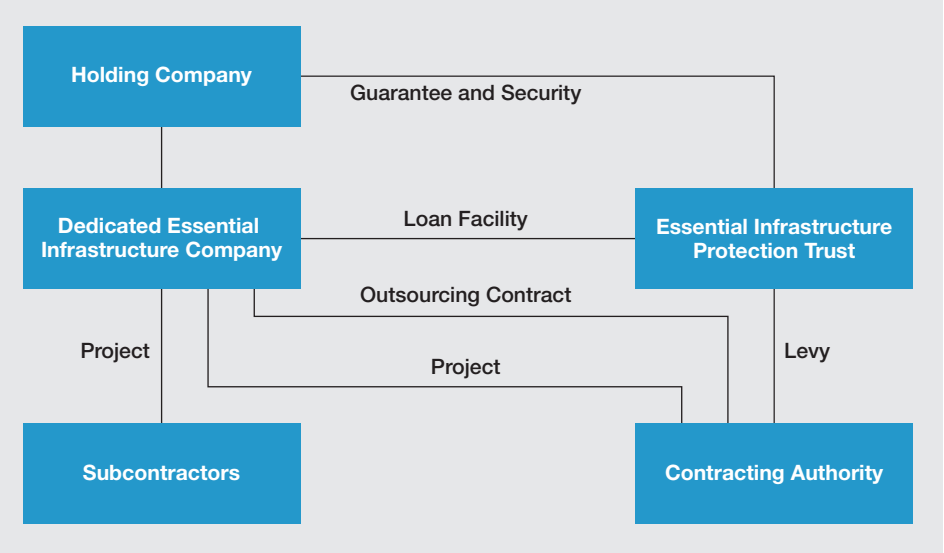
EIP of Last Resort

An EIP of Last Resort would take over at the point of collapse. The EIP of Last Resort will progress the work without charging a premium to the UK Government counterparty, pay sub-contractors etc, until completion or a replacement EIP is found. The EIP of Last Resort would be funded from the EIPT rather than by tax payers.

The EIP of Last Resort could take one of several forms. For example:

1. A UK Government-owned holding company that would sit on the sidelines, minimally staffed, until needed, at which point the DEIC's shares, assets, people and systems transfer to the company. In effect, the DEIC would come under public ownership for a period.
2. Similar to the above but the holding company is not set up until needed. Instead, the UK Government prepares an emergency tool kit and set of rules so that the EIP of Last Resort can come into effect overnight.
3. An outsourced management function; i.e the UK Government procures and pays an external provider to be at the ready.

See box below for a diagram of the above structure.



Conclusion

This briefing focuses on potential structures to help manage the risks inherent in public sector outsourcing and contracting processes. There are clearly viable alternative solutions, but we hope that time spent now on discussing and evaluating possible new approaches to the way that the UK Government procures private sector services will be well spent if a repeat of the Carillion experience can be avoided in the future.

CONTACTS

David Bickerton
Partner
Capital Markets
T: +44 20 7006 2317
E: david.bickerton
@cliffordchance.com

Andrew Dean
Director of Public Law
T: +44 20 7006 3274
E: andrew.dean
@cliffordchance.com

John MacLennan
Partner
Restructuring
T: +44 20 7006 1642
E: john.maclennan
@cliffordchance.com

David Metzger
Partner
Construction
T: +44 20 7006 4240
E: david.metzger
@cliffordchance.com

Michael Pearson
Partner
Infrastructure/PFI
T: +44 20 7006 4753
E: michael.pearson
@cliffordchance.com

David Towers
Partner
Restructuring
T: +44 20 7006 8036
E: david.towers
@cliffordchance.com

NOTES

CLIFFORD
CHANCE

OUR INTERNATIONAL NETWORK
32 OFFICES IN 21 COUNTRIES

Abu Dhabi
Amsterdam
Barcelona
Beijing
Brussels
Bucharest
Casablanca
Dubai
Düsseldorf
Frankfurt
Hong Kong
Istanbul
London
Luxembourg
Madrid
Milan
Moscow
Munich
Newcastle
New York
Paris
Perth
Prague
Rome
São Paulo
Seoul
Shanghai
Singapore
Sydney
Tokyo
Warsaw
Washington, D.C.

Riyadh*

*Clifford Chance has a co-operation agreement with Abuhimed Alsheikh Alhagbani Law Firm in Riyadh
Clifford Chance has a best friends relationship with Redcliffe Partners in Ukraine.

October 2018

CLIFFORD

CHANCE

www.cliffordchance.com

Clifford Chance, 10 Upper Bank Street, London, E14 5JJ

J20181910182152