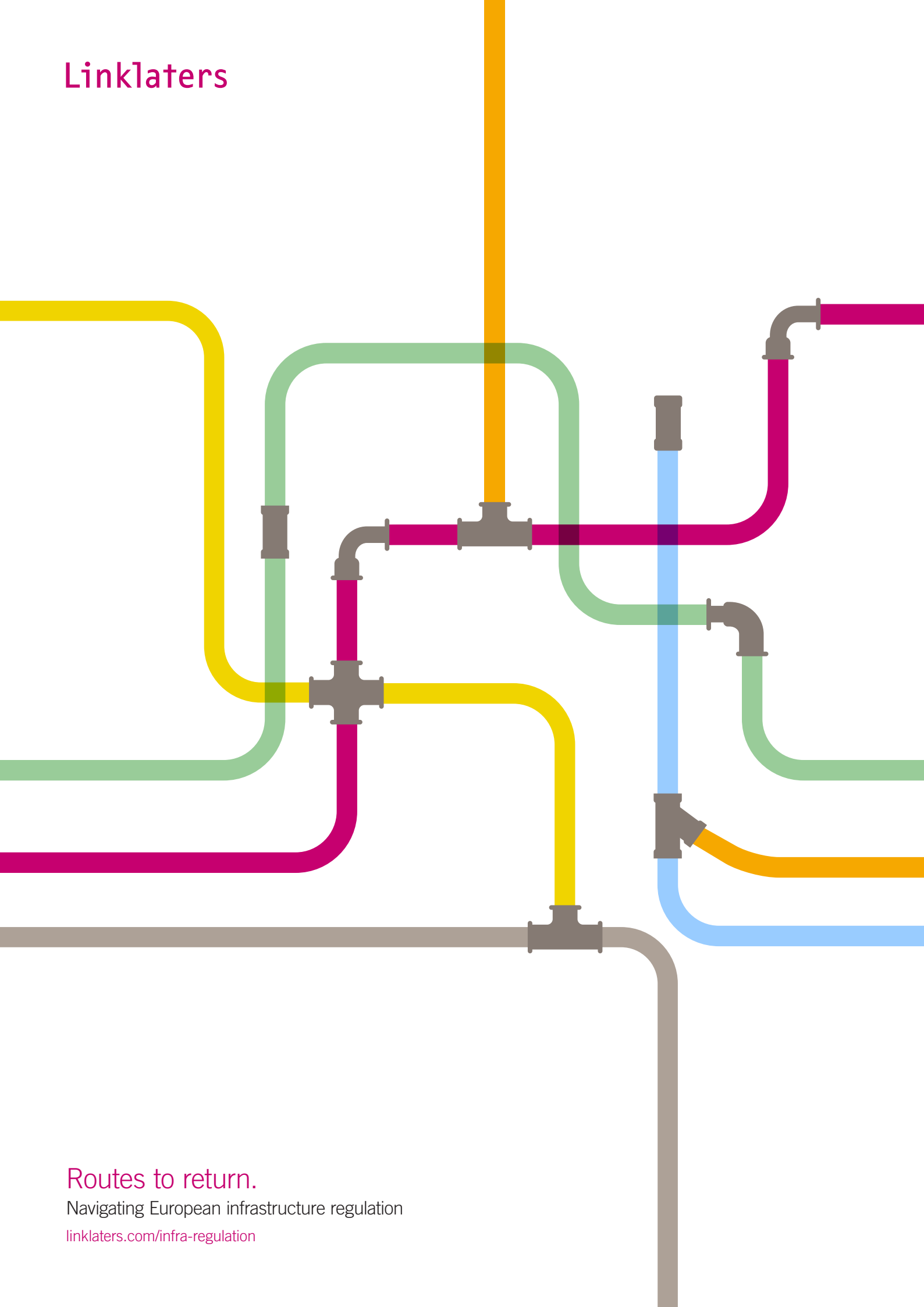


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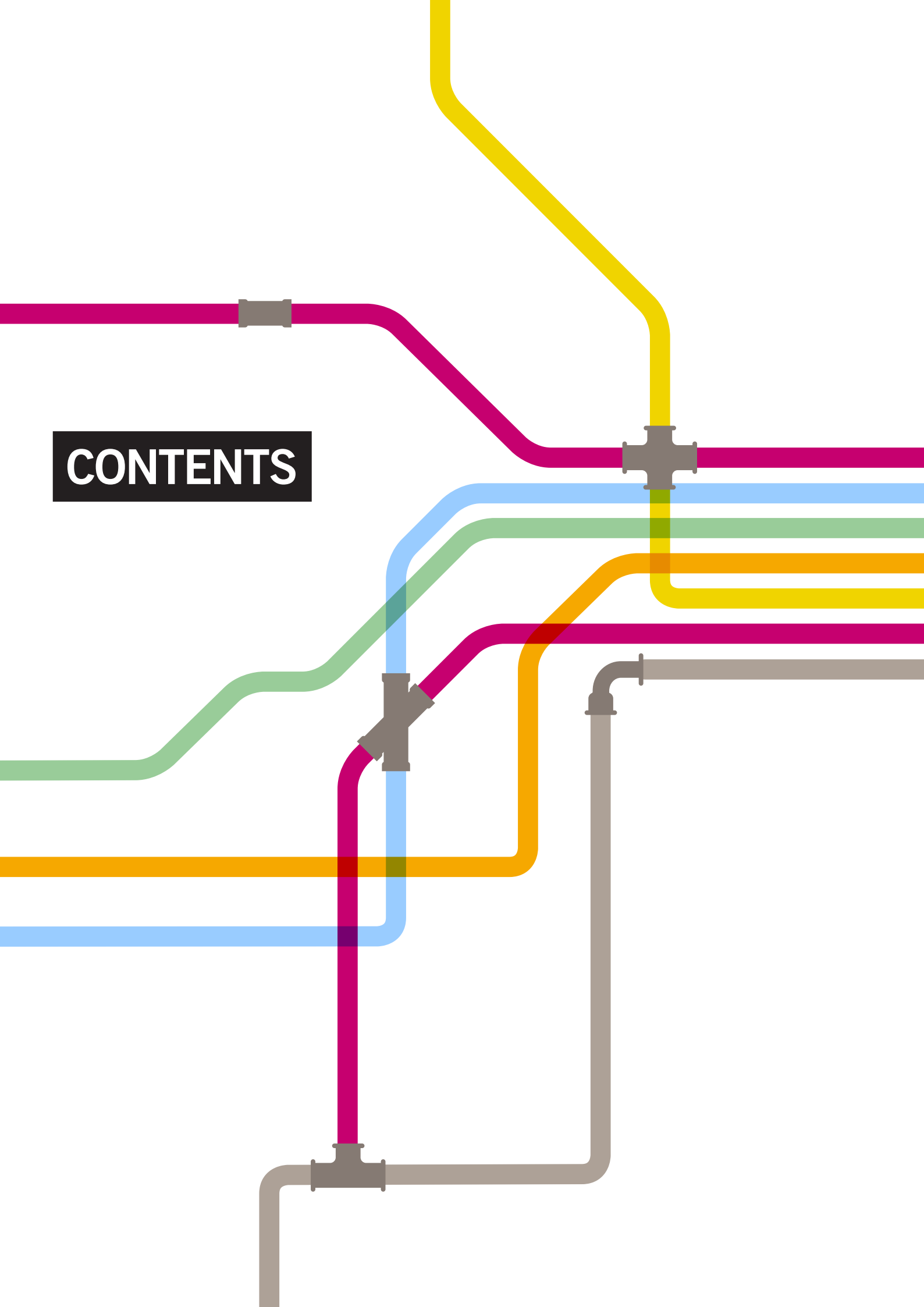


Routes to return.

Navigating European infrastructure regulation

linklaters.com/infra-regulation

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About the report

This report features Linklaters' market insights and research and analysis by economic consultants Fabien Roques and Anthony Legg at FTI Consulting LLP and Compass Lexecon (a trade name of FTI Consulting LLP).



To read our previous report, 'Set to revive: Investing in Europe's infrastructure', go to: linklaters.com/infrastructure-revival

EXECUTIVE SUMMARY

European infrastructure assets have bucked the downward trend to attract significant interest from domestic and international investors over the past decade. Strong deal flow looks set to continue across the sector. However our latest research reveals that changing regulatory arrangements are resulting in investors taking a more selective approach as to which infrastructure assets to pursue and in which countries. The regulatory environment is therefore becoming a significant factor in deciding where to invest. Consequently, it is possible that we will see some rebalancing of deal-flow across Europe.

Our 2014 report ‘[Set to revive: Investing in Europe’s infrastructure](#)’ challenged the perception that the sector is cash poor by showing that there is up to US\$1 trillion of funds available to invest in European infrastructure over the next decade.

Governments, unsurprisingly, are keen to tap into the capital available (which our report estimated to result in an improvement of up to 1.4% to annual EU GDP until 2024) and we are starting to see tangible efforts to make this happen. The European

Commission’s Investment Plan for Europe (referred to as the ‘Juncker Plan’), for example, aims to unlock €315 billion of public and private investment in the real economy.

To evaluate where such investment will take place, it is necessary to look not only at the intersection of sector and geography, but also the effect of regulation. Since the onset of the global financial crisis, we have seen an increased preference amongst investors for the more stable and predictable regimes in Europe, leading to very strong competition for ‘core’ infrastructure assets in countries like the UK, Germany and Scandinavia. However, it should not be assumed that this preference will continue, as investors increasingly look for opportunities offering attractive risk-adjusted returns.

One of the factors contributing to the strong demand for core infrastructure assets has been the perception that these assets have been, and will continue to be, subject to a transparent and predictable set of regulatory arrangements. However, as highlighted in **Figure 1.1 opposite**, some re-evaluation of the regulatory landscape has been triggered and this may alter investor preferences.

We see three broad trends emerging:

1. Tightening economic regulation across Northern Europe:

Several economic regulators and governments in traditionally more attractive destinations have tightened economic regulation.

2. Rising attractiveness of historically less stable assets and jurisdictions:

Signs of a nascent economic recovery across some previously hard-hit parts of Europe, and a few much-needed regulatory reforms, have contributed to an uptick in the attractiveness of certain countries or asset types.

3. New investment opportunities:

At the same time, certain governments and regulators – particularly in the UK – have looked to open up new investment opportunities.

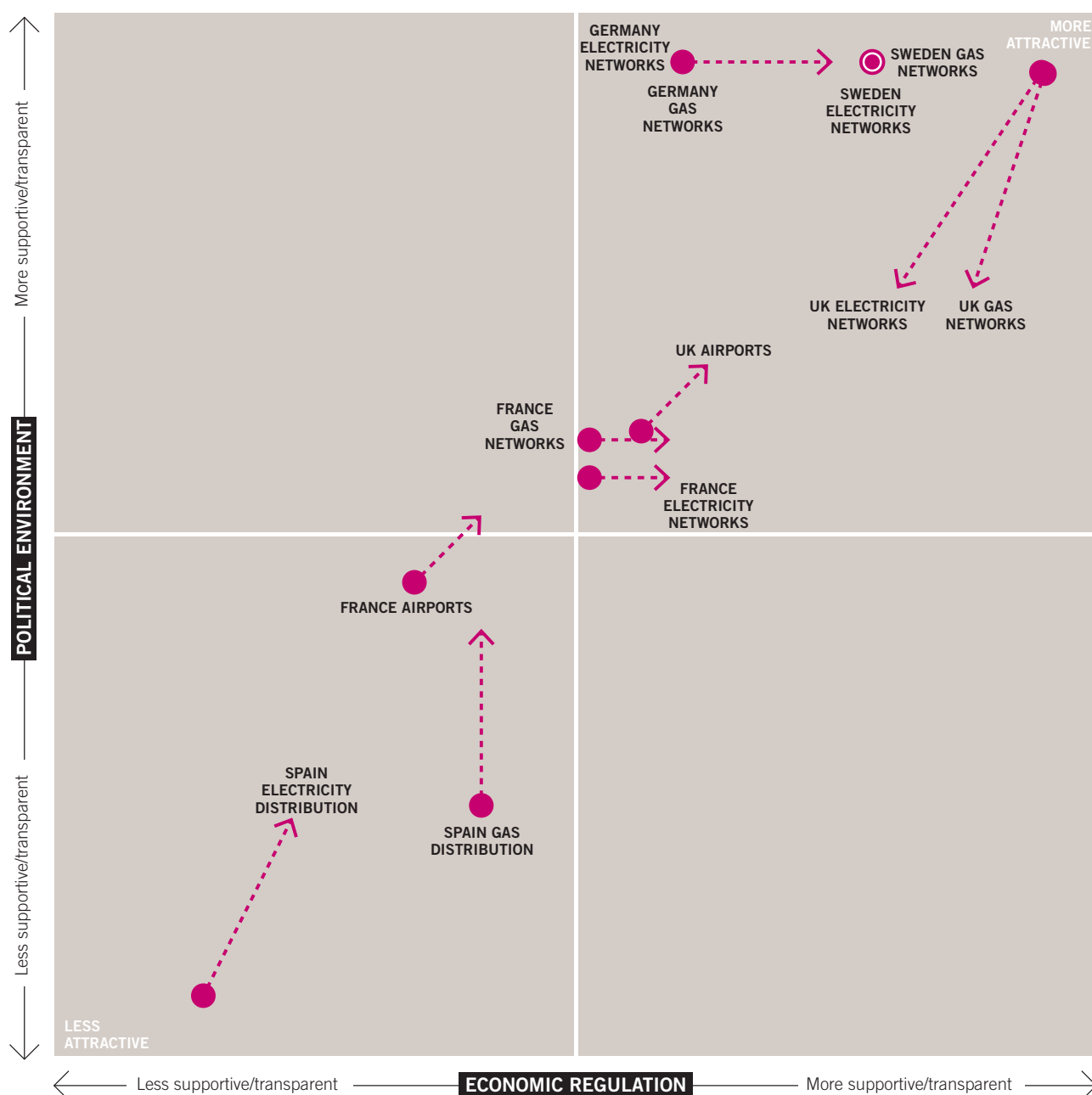
These emerging trends could herald a paradigm shift in the pattern of infrastructure M&A activity across Europe over the coming years. In this report we explore all three trends and their impact on the future regulation of European infrastructure, including implications for investors.

Linklaters Infrastructure Team
[infrastructureregulation](#)
[@linklaters.com](#)

US\$ 1 TRN

PRIVATE FUNDS AVAILABLE FOR
EUROPEAN INFRASTRUCTURE
OVER THE NEXT DECADE*

Fig. 1.1 Impact of trends in European infrastructure regulation (selected countries and sectors)**



*See our previous report 'Set to revive: Investing in Europe's infrastructure'

**For further details, see Regulatory Risk Analysis on pages 22–23.

A TIGHTENING OF THE SCREWS

Northern European countries have historically been the most reliable countries in which to invest, given their long-standing experience and stable political environment. As a result, they have attracted significant interest as a safe haven for investment during the financial crisis and the slow recovery that followed. However, in recent years some economic regulators and governments in these countries have reduced allowed rates of return and put increased pressure on companies to achieve cost efficiencies. In addition, in a number of cases, government interventions have created unusual policy and regulatory risk, disrupting investor perceptions of a stable and predictable regulatory framework.

Selected European regulators' cost of capital decisions
(pre-tax, real unless otherwise indicated)

SOURCE: COMPASS LEXECON AND FTI CONSULTING ANALYSIS OF REGULATORY DETERMINATIONS

	ASSET	PREVIOUS DECISION	LATEST DECISION	CHANGE
Finland	Electricity Distribution ¹	5.3%	3.0%	▼ -2.2%
	Gas Distribution	6.2%	4.2%	▼ -2.0%
	Gas Transmission	8.0%	5.8%	▼ -2.1%
	Electricity Transmission ¹	4.9%	3.0%	▼ -1.9%
France	Electricity Distribution ²	7.3%	7.3%	● 0.0%
	Gas Distribution	6.8%	6.0%	▼ -0.8%
	Gas Transmission	7.3%	6.5%	▼ -0.7%
	Electricity Transmission ²	7.3%	7.3%	● 0.0%
Germany	Electricity Distribution ³	9.3%	9.1%	▼ -0.2%
	Gas Distribution ³	9.3%	9.1%	▼ -0.2%
	Gas Transmission ³	9.3%	9.1%	▼ -0.2%
	Electricity Transmission ³	9.3%	9.1%	▼ -0.2%
Ireland	Dublin Airport	7.0%	5.8%	▼ -1.2%
	Electricity Distribution	6.0%	5.2%	▼ -0.8%
	Gas Distribution	5.2%	6.4%	▲ +1.2%
	Gas Transmission	5.2%	6.4%	▲ +1.2%
	ESB (TAO) ⁴	6.0%	5.2%	▼ -0.8%
	Eirgrid (TSO) ⁵	6.0%	5.2%	▼ -0.8%
Italy	Electricity Distribution	7.0%	7.6%	▲ +0.6%
	Gas Distribution	7.6%	6.9%	▼ -0.7%
	Gas Transmission	6.4%	6.3%	▼ -0.1%
	Electricity Transmission	6.9%	7.4%	▲ +0.5%
UK	Heathrow Airport	6.2%	5.4%	▼ -0.9%
	Gatwick Airport	6.5%	5.7%	▼ -0.8%
	Water companies ⁶	6.2%	4.3%	▼ -2.0%
	Electricity Distribution ⁷	5.6%	4.3%	▼ -1.3%
	Gas Distribution ⁷	6.0%	4.9%	▼ -1.1%
	Gas Transmission ⁷	6.3%	5.1%	▼ -1.2%
	Electricity Transmission ⁷	6.3%	5.3%	▼ -0.9%
	Average			▼ -0.7%

Source: Compass Lexecon and FTI Consulting analysis of regulatory determinations. Notes: (1) Cost of capital decision is vanilla (pre-tax debt, post-tax equity), real; (2) Cost of capital decision is pre-tax, nominal; (3) Cost of capital shown is pre-tax nominal cost of equity (as Germany treats debt costs as a pass-through, rather than setting a WACC); (4) Transmission Asset Owner; (5) Transmission System Operator; (6) England & Wales only; and (7) Great Britain only.

¹ Terna (2015) "Q1 2015 results conference call", 6 May 2015.

² See Energy Market Authority (2011) "Appendix 1 – Regulation methods for the assessment of reasonableness in pricing of electricity transmission network operations in the third regulatory period starting on 1 January 2012 and ending on 31 December 2015", p27, 23 November.

Cutting the allowed rates of return

Historically low interest rates across Europe have triggered substantial reductions in the rates of return set by economic regulators across the continent, as the table opposite illustrates. In most jurisdictions the weighted average cost of capital (WACC) has been reduced significantly at the most recent round of price control determinations, not least because of reduced actual cost of debt. The reductions have been as much as 200 basis points or more and, on average across the selected decisions, by approximately 70 basis points. In those jurisdictions where the cost of capital seems to have increased, such as Italy and Ireland, the most recent determinations were usually made at the height of the sovereign debt crisis, when local government bond yields were at relatively high levels. Therefore, we might anticipate some reductions in the WACC at the next regulatory re-sets for these assets. For example, Terna, which operates Italy's electricity transmission, has recently indicated it expects its cost of capital to be reduced to around 5% from the current 6.3%¹.

Some of these reductions are automatic in the sense that the way some economic regulators have to determine WACC, is linked by legislation to government bond yields. For example, for Finnish electricity transmission grids, WACC is linked directly to yields on Finnish Government bonds by regulatory determination². Some regulators, such as Ofwat in the UK, have also sought to reduce the opportunities for financial engineering to deliver enhanced returns for investors by tightening WACC.

In many cases the reductions in WACC have been driven by a reduction in government bond yields and, in turn, the cost of debt. To the extent these yields rise in the future – for example, as economic conditions normalise – the cost of capital might be expected to rise.

Policy and regulatory interventions creating risk

Throughout the financial crisis governments and regulators have clearly been mindful of maintaining legitimacy by responding to challenges around customer affordability. As a result, they have increased their demands on infrastructure businesses by strengthening financial rewards and penalties for operational performance and the quality of services delivered. This new wave of regulation, combined with the low interest environment, is putting added pressure on returns. See **'Cutting the allowed rate of return' on page 7**.

Economic regulators in the UK have been amongst those challenging infrastructure businesses to deliver more for customers. These challenges have led to an unprecedented wave of regulators' decisions being challenged by companies and their investors.

Examples include:

> **British electricity distribution price controls:** British Gas (BGT), an electricity supplier, and Northern Power Grid (NPG), a UK electricity grid, have both challenged the Office of Gas and Electricity Markets' (Ofgem's) December 2014 RIIO-ED1 price control determination of 10 electricity distribution grids. BGT claims on the one hand that the determination is too soft but NPG, on the other, that it is too challenging.

> **Northern Ireland gas distribution:** Phoenix Natural Gas challenged the Utility Regulator in Northern Ireland's attempt to retrospectively adjust its asset value and re-open its WACC, which had been set as part of a 20-year deal designed to encourage the utility to build out the gas distribution network in Northern Ireland.

> **Northern Ireland electricity distribution:** Northern Ireland Electricity appealed the Utility Regulator's determination of its price control, including the decision to set a very low WACC.

Though there is clearly a continued appetite for infrastructure investment across the UK, these challenges have made some investors mindful of the stability of future investments.

This has not just been a UK phenomenon. For example, Swedish gas and electricity network regulations (see **case study A opposite**) have undergone a major overhaul, switching from ex-post rate of return regulation to ex-ante incentive regulation.

Likewise, decisions by other regulators and governments in a range of sectors and countries have impacted investor confidence.

For example:

> **Norwegian offshore gas transportation:** Gassled will have its tariffs substantially reduced from 2016 onwards as a result of an unexpected decision by the Norwegian Government in late 2013. Gassled's investors, which include ADIA, Allianz and CPPIB, sued the Norwegian Government in January 2014. While the decision is pending, regardless of the outcome, the tariff reductions

"have damaged trust in Norway and potentially harmed investment in infrastructure in general."³

> **Irish water:** The independent economic regulator's initial price control determination in 2014 for the newly-established national water company, Irish Water, was overturned. The government substituted a lower level water charge, as a result of public pressure.

> **French toll-roads:** The government recently sought to freeze tolls on privately owned motorways, despite the long-term agreements under which the motorways were funded, including provisions for charges to be indexed to inflation. As a result an agreement between the parties is currently being worked on.

> **French airports:** There is a limited track record of economic regulation applicable to airports in France and so there remain some unanswered questions for investors. These centre around what the government's role might be in relation to determining airport charges and whether a single or dual toll approach to regulation might be adopted. However, the French Government is in the process of delivering a reform programme and an independent economic regulator is likely to be introduced in the second half of 2015. Both factors may well ease investor concerns as we discuss further in **case study B on page 10**.

There have also been a number of decisions by governments with respect to support mechanisms for renewable energy sources (e.g. Italian solar PV, Spanish solar PV, Spanish wind and UK solar PV). Many of these ended up in litigation, or appear likely to. ►

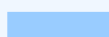
³ Bloomberg (2014) "Allianz pleads with Norway's premier after Gassled writedown", 25 February.

Case study A: Swedish electricity network regulation – no longer the good old days?



REGULATORY CHANGE CAN BE POSITIVE, BUT IT DEPENDS ON HOW IT'S MANAGED.

Joe Blum
GIP



Following new legislation passed by the Swedish parliament in 2009, the Energy Markets Inspectorate (Ei) looked to introduce new price controls for the electricity distribution networks (DSOs) for the 2012-2015 period. The new price controls were to be based on a 'building block' methodology, whereby allowed revenues were equal to the sum of allowed costs and an allowed profit (set by reference to WACC and a regulatory asset base (RAB)). As part of its

decision, the Ei looked to phase in the new forward-looking regulatory regime through transitional arrangements. These continued to determine a significant proportion of the DSOs' revenues by reference to the previous historic-cost based method.

Three major DSOs decided to appeal against the Ei's decision at the Swedish Administrative Court, contending that:

- > the new price controls did not enable the DSOs to earn the cost of capital on new investments;
- > upstream network costs were not being appropriately passed through to customers;
- > the allowed cost of capital was too low; and
- > the transitional arrangements were illegal.

The Appellate Court granted leave to appeal in three cases which it examined as 'test cases'. The court rendered its judgments in these three cases in November

2014. It dismissed the Ei's appeal in relation to the WACC rate and the transitional arrangements. The Ei appealed the Appellate Court's ruling to the Administrative Supreme Court, which dismissed the Ei's appeal.

Alongside the introduction of ex-ante regulation for the electricity DSOs, the government has legislated for similar forward looking arrangements for the gas network operator, Swedegas. And like the electricity DSOs before it, Swedegas has appealed the Ei's attempt to implement the new price controls to the Swedish courts, which have yet to make a decision.

While the courts' decisions may prove more favourable to the network companies, the fact that these companies felt the need to appeal against the Ei's initial decisions following fundamental changes to economic regulation inherently means that the excellent reputation of the Swedish energy network for economic regulation stability is likely to have been impacted.



THE SWEDISH MARKET REMAINS HIGHLY ATTRACTIVE TO INVESTORS. THERE IS, HOWEVER, NO DOUBT THAT REGULATORY CHANGES HAVE REQUIRED THEM TO CONSIDER THEIR FINANCING STRUCTURES AND MODELLING IN A MUCH MORE COMPLEX WAY THAN WOULD PREVIOUSLY HAVE BEEN THE CASE.

Ian Andrews

Linklaters partner in London who advised the winning bidder on Fortum Sweden



Case study B: French regional airports privatisation – open for business?

The French Government is in the process of selling off most of its shareholdings in several of the country's most significant regional airports to private investors. The sale of Toulouse-Blagnac airport recently concluded and the sales of Lyon-Saint Exupéry Airport and Nice-Côte d'Azur Airport are expected to commence shortly. There is also speculation that other airports, such as Bordeaux-Mérignac Airport, could be privatised in the near future. The assets have reportedly attracted significant interest from both local and international investors, but the bid processes have been characterised by complex policy discussions which have led to delays and uncertainties about the regulatory arrangements going forward.

One factor which may have hampered investors is a lack of clarity around how the airports' charges will be set in the future, given that the regulatory framework is evolving and the outlook for economic regulation is uncertain.

For example:

- > There is no independent economic regulator for the airport sector in France, though one is expected to be established in the second half of 2015.
- > The government's role in determining charges for the airports is unclear and not transparent.

> There is a limited track record of economic regulation of any kind. While 'economic regulation contracts' were originally legislated for in 2005, there are few examples of these arrangements having been negotiated between the airport operators and the French Government in practice. To date, only Paris, Lyon and Toulouse airports have adopted these arrangements.

> There is an absence of clarity about whether a 'single' or 'dual' till approach to regulation will be adopted. This makes it unclear the extent to which non-aeronautical revenues (such as revenues from retail outlets and car parking) will be used to cross-subsidise aeronautical charges.

Another factor which might have contributed to investors' caution is uncertainty around the government's role in the commercial decision-making of the Toulouse airport. The structure of the board is such that private investors hold less than 50% of the seats, which could mean that their operational plans are not carried out. In addition, while the state has provided assurances that it will vote with private investors on most issues, there are still some matters which seem likely to be decided by the government alone.

A third factor may have been unease about the likelihood of a non-French investor winning the auction. Perceptions about the

government's attitudes to business, particularly the termination of the PPP contract for the *écotaxe* and the freeze of motorway tolls, may have put off some investors according to media reports. Adding to this unease may have been an assumption that a close relationship with the French Government would be essential not only to bidding successfully for the assets, but also to delivering on the acquisition strategy.

That being said, the fact that Chinese investors, without much track record in operating airports, were ultimately successful in their bid for Toulouse airport suggests that, while there was much political noise around the selection process, the government ultimately adopted a neutral auction approach. This positive ending suggests that there are likely to be further opportunities for investors with the forthcoming privatisations of Nice and Lyon airports, particularly as some of the uncertainty around economic regulation may dissolve over the second half of 2015 with the establishment of an independent economic regulator.



Furthermore, concerning the future privatisations in Lyon and Nice, the Minister of Economy has also taken measures to respond to the criticisms around the Toulouse privatisation. Namely, a draft bill has been proposed with the goal of reaching a consensus before the launch of future airport privatisation processes. The draft bill requires the government to provide selection criteria, including: experience in airport management, preservation of key matters of national interest, preservation of the attractiveness of the territory and cooperation with local authorities. The bill also encourages dialogue between the purchaser and the local authorities involved.

Paul Lignières, a Linklaters partner in Paris, says, "It is important to remember that the French Government launched the airports reform programme 10 years ago under a conservative government. For political reasons, however, the process was postponed several times. Nonetheless, the government remains committed to the reform programme."

He continues, "It has a track record of honouring its commitments even when it has had to pay an expensive price, as was the case for the termination of the *écotaxe* programme. The government's compliance with the rule of law remains a competitive advantage of doing business in the French market."

Perhaps investor concern has been most strongly evidenced by the formation of the Global Infrastructure Investor Association (GIIA). In March 2015, 25 of the world's major European and North American institutional investors came together to form an industry association that aims to engage directly with governments and regulators on regulatory and investment issues. The objective of the GIIA is to foster greater regulatory stability from the public sector and to act as a representative for private equity investors in infrastructure.

Despite what many may consider to be unwarranted government and regulator interventions in recent years, a number of which are highlighted within this section, Ian Andrews, a Linklaters partner in London, notes that we should put such occurrences into perspective. "Though some countries have implemented policy and regulatory interventions in recent years, this does not mean that they no longer offer strong investment opportunities. Indeed, many remain the 'gold standard' for regulators worldwide." As highlighted in our Regulatory Risk Analysis in Section 4 of the report, many of the assets and geographies that have experienced regulatory change in recent years continue to offer the most stable/transparent political environment and economic regulation. As a result, we continue to see strong interest for almost all assets that come up for sale in North-West Europe. ■



THE FRENCH GOVERNMENT HAS REMAINED STEADFAST IN ITS WILL TO REFORM THE INDUSTRY DESPITE CHANGING POLITICAL CYCLES AND AGENDAS. THE CURRENT SOCIALIST GOVERNMENT HAS BEGUN TO IMPLEMENT THE REFORM PROGRAMME AND IS GEARED TO ACHIEVE ITS FULL IMPLEMENTATION.

Paul Lignières

Linklaters partner in Paris who advised a bidder on Toulouse Airport

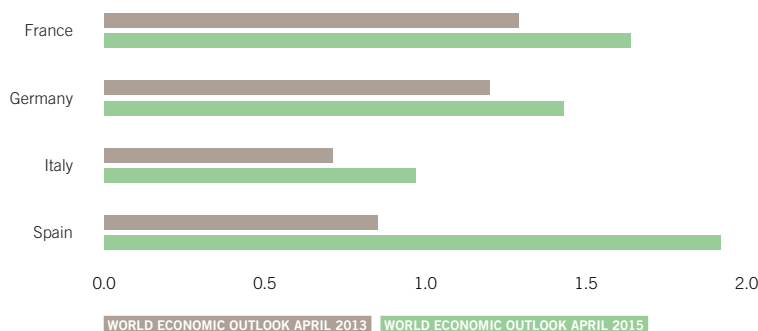


AN UPTICK IN ATTRACTIVENESS

Improvements in both the transparency and predictability of economic regulation, as well as reductions in the likelihood of government interventions, can increase the attractiveness of investment opportunities in any given sector and country. We have seen this, to varying degrees, across some asset classes and in parts of Europe which were previously regarded as less attractive investment destinations.

Fig. 2.1 Real GDP growth forecasts: average forecast annual growth rate (% per annum)*

SOURCE: COMPASS LEXECOM AND FTI CONSULTING ANALYSIS OF IMF'S WORLD ECONOMIC OUTLOOK DATA



*Compound Annual Growth Rate 2014–2023.

Reductions in the likelihood of government interventions

As regulatory interventions across some parts of Europe traditionally viewed as more stable have increased (as explored in Section 1), we have also seen a reduction in the likelihood of unpredictable government interventions in some countries previously regarded as less predictable. At least two factors may have contributed to this:

- > an improvement in the economic outlook; and
- > governments have learned lessons from the success of other countries and from their own past interventions, which damaged investor confidence and willingness to invest.

For example, the Italian Government's 'Robin Hood Tax' has recently been abolished. The additional corporate tax (IRES) of 6.5% was originally introduced in 2008 in an attempt to rein in what was considered to be an excessive level of profit for energy companies as a result of high oil prices. In 2011, the Decree introduced some amendments to the legislation which saw the scope of its application broadened to include renewable energy companies and those operating in electricity and gas transmission and distribution. It also temporarily increased the IRES rate to 10.5%, before being reduced back to 6.5% in 2014. The tax was subsequently deemed 'unconstitutional' by the Italian Constitutional Court in February 2015.

All else being equal, an improved economic outlook of a country is likely to make investment more attractive as volume risks associated with fluctuations in demand decrease. An improved economic outlook can also enhance the perception of regulatory arrangements in any given country as the likelihood of government interventions, such as the imposition of windfall taxes or tariff freezes, are likely to subside. As such, the recent 'green shoots' which have emerged in some of the European economies hardest hit by the financial crisis (as illustrated in **Figure 2.1 above**) are likely to underpin improvements in the regulatory arrangements in those countries.

Jose Gimenez, a Linklaters partner in Madrid, notes, "Some of the political factors which have driven past interventions by governments may have dissipated and this may re-align government and investor interests." He says, "Governments will be keen to encourage investment in infrastructure as a means of stimulating their economic recoveries and catching up on some of the underspending on infrastructure which took place during the recession. Consequently they will be looking to avoid unnecessary interventions which undermine investor confidence."

Governments may also look to take advantage of the Juncker Plan which will make funds available for infrastructure investment, but transparency and predictability will be an important factor in securing that support.

Improvements in transparency

At the same time as the risk of unpredictable government action appears to be waning across some parts of Europe, we have also seen some improvements to economic regulation and the associated legal frameworks which have made regulation more transparent. This is likely to enhance perceptions of regulatory arrangements in those countries. One such example is Spanish electricity distribution (see **case study C overleaf**) where significant strides have been made by the government to improve the transparency of the regulatory arrangements and to align it more closely with international best practice. ►

+1.4%

THE EU COULD EXPECT TO SEE A 1.4% IMPROVEMENT TO ITS ANNUAL GDP BETWEEN 2014–2023 SHOULD THE US\$1 TRILLION OF DRY POWDER AVAILABLE FOR EUROPEAN INFRASTRUCTURE BE INVESTED.**

** See our previous report 'Set to revive: Investing in Europe's infrastructure'

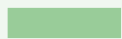
Case study C: Spanish electricity distribution – getting the house in order



THE TRAJECTORY OF REGULATORY CHANGE OVER THE PAST 18 MONTHS HAS PROVIDED INVESTORS WITH A DEGREE OF FUTURE CLARITY, SUFFICIENT AT LEAST TO FORM A VIEW ON THE UNDERLYING RISK AND THEREFORE REQUIRED RETURN.

**Jeannette Smits
van Oyen**

JP Morgan



The regulatory arrangements applied to Spanish electricity distribution, which determine the charges levied on customers, have long failed to cover the costs of network services. However, decisions taken during the financial crisis to reduce tariffs and abolish the independent economic regulator have worsened the situation, undercutting investor confidence in the sector.

In an attempt to restore investor confidence, noting the significant capital expenditure (capex) needs of the sector, the Spanish Government has made a number of changes to the regulatory arrangements applied over the past two years. These changes, set to come into effect from 2015, have been aimed at providing greater clarity about future revenues by setting out formulaically how those revenues will be determined, including through the introduction

of a RAB model. Further adding to confidence about the new arrangements, the legislative changes limit the difference between revenues and costs to 2%, with any greater difference automatically triggering a change in network charges.

The recent changes and emerging signs of economic recovery may have contributed to investors' recent interest in the electricity distribution assets which have come to market. Nevertheless, some uncertainties remain. The changes above will help to reduce the size of the annual tariff deficit from a €3.5 billion shortfall to a more than probable surplus in 2014, which would be used to reduce the accumulated tariff deficit. The Spanish Government has yet to implement measures that appear likely to deal with the historic tariff deficit which has accumulated in recent years.



THE RECENT CHANGES TO THE REGULATION OF ELECTRICITY DISTRIBUTION IN SPAIN REPRESENT A SIGNIFICANT STEP TOWARD IMPROVING TRANSPARENCY AND PROVIDING A SOUND FRAMEWORK TO DE-POLITICIZE THE TARIFF EVOLUTION PROCESS.

Fabien Roques

Senior Vice President,
Compass Lexecon



THE RECENT INTEREST IN E.ON'S ELECTRICITY ASSETS IN SPAIN AND PORTUGAL DEMONSTRATES THE RETURNING APPETITE OF INVESTORS FOR SPANISH ENERGY INFRASTRUCTURE ASSETS. THOUGH THE NEW REGULATORY ARRANGEMENTS FOR THE ELECTRICITY ASSET CLASS ARE STILL IN THEIR INFANCY, IF THE GOVERNMENT CAN MAINTAIN THE STABILITY AND PREDICTABILITY ASSOCIATED WITH A RAB REGULATORY MODEL, INVESTOR CONFIDENCE WILL CONTINUE TO GROW.

Jose Gimenez

Linklaters partner in Madrid who advised the winning bidder on the acquisition of E.ON's electricity assets in Spain and Portugal

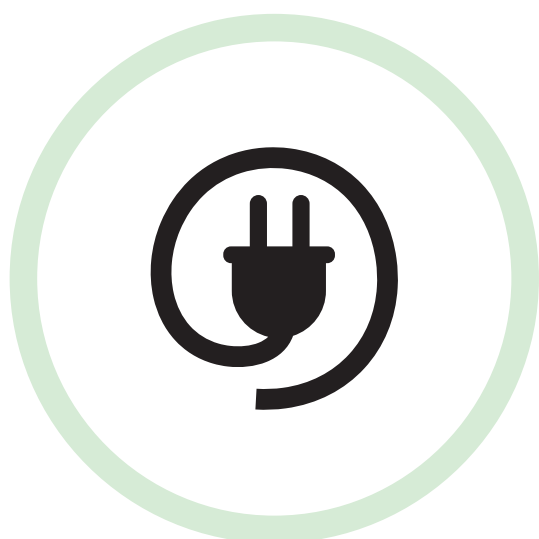


There are other examples too:

- > The Italian energy regulator, AEEGSI, recently consulted on its approach to setting the cost of capital for Italy's regulated electricity and gas sectors. The review considers how to improve the methodology employed for estimating WACC and to ensure allowed returns are consistent with the risks faced by these businesses.
- > Similarly, in France the upcoming introduction of independent economic regulation – replacing regulation by contract – for some infrastructure sectors is expected to increase transparency of decision-making.

A word of caution

The improved economic outlook, a desire to stimulate investment and some enhancements to price-setting methodologies are likely to increase the attractiveness of parts of Europe previously regarded as less stable and predictable. However, there remain examples that encourage investors to proceed with caution. For example, whilst retrospective adjustments to subsidy arrangements for renewables generation have, on the whole, decreased in frequency, in late 2014 the Italian Government voted in favour of retrospective cuts to Feed-in Tariffs (FiTs) already awarded to operational photovoltaic plants above 200 kW. Similarly, the Spanish competition authority's (CNMC's) recent proposed adjustments to the airport operator's (Aena) tariffs from 2016 onwards, provides another cautionary tale. ■



WE ARE SEEING A MORE STABLE AND TRANSPARENT SET OF REGULATORY ARRANGEMENTS EMERGING IN SOME SOUTHERN EUROPEAN COUNTRIES SUCH AS SPAIN, AND INVESTOR INTEREST IS BUILDING AS A RESULT. TIME WILL TELL WITH REGARDS TO ECONOMIC RECOVERY AND GOVERNMENT COMMITMENT TO THE NEWLY PROPOSED REGULATORY ARRANGEMENTS. THE MORE CAUTIOUS INVESTOR WILL LIKELY PREFER TO WAIT AND SEE.

Ulrich Wolff

Linklaters partner in Frankfurt





OPENING UP NEW OPPORTUNITIES

In parallel to more restrictive economic regulation, many North-West European regulators have looked to open up new opportunities by providing greater incentives to operate assets in an efficient way. This paves the way for market forces to play a greater role in delivering infrastructure investments.



Providing greater incentives to investors

A number of recent regulatory innovations have resulted in opportunities to boost return on equity by linking financial rewards to key performance indicators (KPIs) such as: investment, quality of service, innovation, environmental performance and efficiency savings. These have occurred partly in recognition of the fact that significant reductions in the allowed WACC have limited opportunities to enhance returns through financing decisions and partly out of a desire to focus operators' minds on the delivery of service improvements and efficiency gains.

For example, operators of electricity distribution networks in Finland and Sweden have been given the opportunity to achieve a higher rate of return if they meet quality of service targets as part of recent price control determinations. The *Bundesnetzagentur* in Germany has also gradually introduced additional performance-based incentive mechanisms for electricity and gas transmission networks since the first regulatory period (2009-2013 for electricity, 2009-2012 for gas). It has recently signalled that further mechanisms could be introduced for the next period.

In the UK, regulators, particularly those in energy and water, have introduced a plethora of financial and reputational rewards and penalties. Both relate directly to the outcomes customers and other stakeholders desire as well as to secondary performance indicators such as asset health indices. On the other hand, less focus has been given to the delivery of specific assets, or to the mix of capex and operating expense (opex) to deliver services. Companies are trusted, subject to the enhanced rewards and penalties, to optimise expenditures to deliver the services customers want in the least costly way. ►



THE SHORTAGE OF ASSETS ACROSS EUROPE, PARTICULARLY ACROSS NORTH-WEST EUROPE, AND THE RESULTING HIGH PRICES, HAVE IN MANY CASES FORCED INFRASTRUCTURE INVESTORS TO LOOK BEYOND TRADITIONAL INFRASTRUCTURE ASSETS, IN THEIR SEARCH OF OPPORTUNITIES AND HIGHER YIELDS.

Jessamy Gallagher
Linklaters partner, London

Paving the way for market forces

The UK regulators have started to experiment with new infrastructure asset classes which depart further from the traditional infrastructure regulation model by unleashing competitive market forces. The regulatory arrangements applied to these asset classes boost investor confidence by limiting the potential downside risks and/or providing some certainty of revenue for incumbent operators.

Governments and regulators are matching specialist service providers and financiers with investment opportunities which align more closely with their preferences and skill-sets, than larger, less specialised incumbent providers. They have done so in a bid to achieve better value for money.

Offshore electricity transmission (OFTO) assets, discussed in more detail in **case study D opposite**, have been one successful asset class created in the UK, but there are others. A bespoke set of regulatory arrangements has been developed for the Thames Tideway Tunnel project, explored in more detail in **case study F on page 20**. Given the sheer size of the project, Thames Water, the Water Services Regulation Authority (Ofwat) and the Department for Environment, Food & Rural Affairs (DEFRA) have devised a new structure known as the infrastructure provider delivery model, based on the Flood and Water Management Act 2010.

Ofgem is also contemplating competitive tendering for certain large and complex onshore electricity transmission projects, with a view to running a first tender in 2016 or 2017⁴. Another example is the roll-out of smart metering across Britain, which is creating new opportunities to invest in the associated infrastructure: not only the meters themselves, but also the communications network.

Furthermore, Ofgem has developed a cap and floor regime to apply to merchant electricity interconnectors. By guaranteeing a minimum-level of revenue, in return for a cap, investors in electricity cables connecting otherwise separate power markets are partly insulated from the commercial risks they would otherwise bear. Ofgem has even issued an invitation to interested parties to help them better understand the fit of the existing cap and floor regulatory model, different financing options, and areas in which amendments to that model may enable greater alignment in the future. The hope is that this additional protection and open dialogue with investors will encourage more investment in this infrastructure class, ultimately, improving the resilience of the electricity system, reducing costs and reducing carbon emissions. Early signs indicate that Ofgem's new regime is proving attractive to potential investors⁵.

This is not just a UK trend. Germany recently piloted a new auction based approach to determining the level of FiTs, which will see solar installation developers competing for government support. We explore this approach further in **case study E opposite**.

Elsewhere in Europe, there are also signs that EU regulation may eventually trigger others to follow the lead of the UK and Germany. For example, the EU 3rd Energy Package has extended requirements for the unbundling of generation and transmission activities. This has prompted many governments to consider the best way to deliver offshore subsea cables connecting windfarms to the onshore grid. Factors for consideration include whether a third party might be better placed than the incumbent onshore grid operator or whether modifications to the onshore regulatory framework might be required to make it fit-for-purpose for offshore investments.

Likewise, the EU's 4th Railway Package aims to encourage new entrants into the market by liberalising the European passenger rail market. This could lead to the emergence of new train-operating companies (TOCs) and rolling-stock operators (ROSCOs) to run franchises and/or provide infrastructure to incumbent operators. ▶



WHILE THE INITIAL ROUND OF PROJECTS IS RELATIVELY SMALL, FURTHER ROUNDS WILL FOLLOW AND THE TENDERING CONCEPT – UNDER ADJUSTED CONDITIONS – WILL BE APPLIED TO OTHER RENEWABLES TECHNOLOGIES. THIS WILL ENSURE THAT THE SECTOR FURTHER GROWS AT A RATE BETTER HARMONIZED WITH OTHER CONSIDERATIONS SUCH AS COST TO THE PUBLIC AND GRID EXTENSION.

Thomas Schulz

Linklaters partner in Berlin who recently advised a fund on the acquisition a large ground-mounted PV plant in Germany

⁴ See Ofgem (2015) "Integrated Transmission Planning and Regulation (ITPR) project: final conclusions", 17 March, p15.

⁵ Several applications to develop interconnectors under the cap and floor regime have been submitted to Ofgem: NEMO (UK – Belgium), NSN (UK – Norway), FAB Link (UK – France), IFA2 (UK – France), Viking (UK – Denmark) and Greenlink (UK – Ireland). All of these projects, except Greenlink, have been provisionally approved by Ofgem.

Case study D: UK OFTOs to ONTOs: a coming of age?

In order to support a rapid increase in the deployment of renewable energy in the UK, particularly in relation to offshore wind, a step change was required in network investment and how this was to be delivered. In response to this challenge, over five years ago the UK Government established the offshore transmission regulatory regime (commonly known as the OFTO regime). Under a competitive tendering process which is administered by Ofgem, third party investors bid to acquire offshore transmission assets which have already been constructed by wind farm developers. The successfully bidder (known as an offshore transmission owner or OFTO) is awarded a long-term licence under which it is responsible for the operation and maintenance of those offshore transmission assets.

This regime is seen as being highly successful, with 14 OFTOs, valued at approximately £2.7 billion, having been appointed to date. The OFTO regime has also brought considerable savings for the consumer, which the UK Government estimates to be between £200 million and £400 million. The success of the OFTO regime can be strongly

linked to the nature of the asset class, the transparent and predictable regulatory regime and the availability-based revenue stream.

A key feature of the regime to date has been that OFTOs have not taken construction risk: each OFTO has only been awarded once the relevant offshore transmission assets have been constructed. However, such has been the success of OFTO regime, that Ofgem is now also looking to attract third party investors to take responsibility for designing and/or constructing offshore transmission assets and even “separable and high value” onshore transmission assets (increasingly being known as the ONTO regime). This latter development is a key element of Ofgem’s Integrated Transmission Planning and Regulation project.

The design of the regulatory framework to support the ONTO regime is still being finalised and Ofgem is currently consulting the market on how the “separable and high value” criteria should be defined and applied. The conclusions of this consultation process are due in autumn of 2015, with the first ONTO tender expected in late 2016 or 2017.



BUILDING ON THE SUCCESS AND EVOLUTION OF THE OFTO REGIME, THE ONTO REGIME IS LIKELY TO PROVIDE ANOTHER NEW AND EXCITING ASSETS CLASS FOR INVESTORS WHO HAVE APPETITE FOR CONSTRUCTION RISK.

Richard Coar

Linklaters partner in London who has advised bidders in relation to every OFTO sale. He has also advised the vendor or successful purchaser on half of the OFTO sales to have completed to date.

Case study E: German renewables subsidy auctions – a new way of supporting investment

The renewable energy sector has expanded rapidly in Germany over the past decade. FiTs, determined by the government, have been a key driver of investment. However, responding to concerns about the additional volatility introduced to energy markets and the overall cost of the subsidy schemes, the German Government is piloting a new, auction based, approach to determining the level of the FiTs. Following on from the amendment of the Renewable Energy Sources Act in 2014, the Ground-mounted PV Auction Ordinance will see solar installation developers competing for government support. Competitive tenders

will see FiTs, fixed for 20 years, set at the market-clearing price per kilowatt hour. This will enable the government to meet a pre-specified capacity of new investment. By determining the required level of investment, the government can control the rate at which new renewable energy sources come to market, and the competitive auction ensures the government secures the best value for money for consumers.

The first pilot of the scheme for solar PV earlier this year saw 150 megawatts of capacity auctioned off to 25 projects at a price slightly above the pre-existing government

set FiT level. The fact that the tender was significantly over-subscribed, with 170 bids submitted in total, is a cause for optimism, suggesting the government’s stated ambition to roll-out the new competitive auction process to other renewable technologies could also attract significant investor interest. Further, while the initial round of projects is relatively small, as new technologies are incorporated into the scheme – and particularly if the pilot proves successful – the scale of the projects could be enhanced, attracting larger investors into the sector.

Case study F: Thames Tideway – the infrastructure provider model



THE IP DELIVERY MODEL IS THE CULMINATION OF A NUMBER OF YEARS OF INTENSE WORK BETWEEN THAMES WATER, DEFRA AND OFWAT AND DEMONSTRATES WHAT CAN BE ACHIEVED WITH PRIVATE SECTOR AND PUBLIC SECTOR WORKING TOGETHER TO DELIVER AN INVESTMENT WHICH IS ATTRACTIVE TO THE MARKET.

Michael Gerrard

MD Thames Tideway Tunnel, Thames Water

In the UK, water and waste water assets are owned and operated by water and waste water companies (“WASCs”) who are economically regulated by Ofwat. Due to the requirements of environmental regulations, including the EU Urban Waste Water Treatment Regulations, it has become necessary to build a 25km tunnel under London to intercept combined sewer overflows into the River Thames, at the cost of some £4.2 billion. A project of this size would dwarf the average capital investment project of a traditional WASC. Therefore Thames Water (the incumbent WASC), Ofwat and Defra (the relevant UK Government department) devised a new bespoke regulatory structure known as the infrastructure provider delivery model based on the Flood and Water Management Act 2010.

This delivery model presents a unique investment opportunity to the infrastructure investor market. The infrastructure provider (“IP”) will be a separate self-standing independent utility company, economically regulated by the

water industry regulator, Ofwat. The IP will be funded by customers and will design, construct, own, operate and finance the Thames Tideway Tunnel, which will become a new part of the existing sewer network.

The IP structure is devised to have an attractive core infrastructure cash flow profile reflecting regulation based on the well-established water regulatory framework for England and Wales, but with key adaptations. The WACC, instead of being set by the regulator, is bid by investors and will be fixed until after construction completion plus an operational period (the “BWACC period”). Cash flows are inflation protected and there is a running yield available throughout the construction period. Bespoke regulatory adaptations include:

- > value-for-money contractual framework pre-agreed with the regulator Ofwat;
- > automatic logging up of allowable project spend (within this framework), with no ex-post review up to a pre-agreed limit (known as the “Threshold Outturn”);
- > no periodic review or amendments to the revenue provisions prior to the end of the BWACC period; and
- > revenue adjustment for the real cost of debt (outside a pre-defined collar) thereby limiting the IP’s exposure to market cost of debt investments.

The IP structure also includes a government support package. For certain exceptional events which are considered poor value-for-money for the private sector to bear, the government provides (and charges for) contingent financial support which includes:

- > if requested by the IP, funding above the Threshold Outturn where the shareholder’s obligation to finance is capped;

- > compensation for investors and funders should the government decide that the Project must be discontinued;

- > support for insurance claims which exceed commercial insurance limits; and

- > a committed debt facility in the event of disruption in the debt capital markets.

The successful IP will be awarded a Project Licence by Ofwat thereby creating a new class of economically regulated utility.



THE INFRASTRUCTURE PROVIDER MODEL CREATES A HYBRID STRUCTURE FOR THE DELIVERY OF LARGE SCALE INFRASTRUCTURE PROJECTS. IT SEEKS TO HIT THE TARGET FOR INFRASTRUCTURE INVESTORS, OF LONG TERM STABLE INVESTMENT RETURNS WITH AN ADAPTED REGULATORY REGIME WHICH HARNESSSES THE BENEFITS OF STABLE ECONOMIC REGULATION THROUGH TARGETED REGULATORY ADJUSTMENT. A MAJOR QUESTION FOR FUTURE INFRASTRUCTURE INVESTMENT IS THE EXTENT TO WHICH THIS MODEL COULD FORM A BLUEPRINT FOR OTHER LARGE SCALE INVESTMENTS IN THE UK AND OTHER JURISDICTIONS, SUCH AS NEW AIRPORT DEVELOPMENT.

Charlotte Morgan

Linklaters partner in London advising Thames Water on the Thames Tideway project



There are still a few unknowns that may cause investors to view these new asset classes as less attractive than some of their more established counterparts. They have, by definition, little or no track record of implementation, and in some cases uncertainties around the regulatory arrangements may not yet have been resolved. For example, a regulated business could challenge the operation of a particular clause in its license or the relevant legislation. Adding to this concern may be the fact that all of the examples explored in the case studies have been subject to ongoing modification since their inception. For example, Ofgem has updated the license terms applicable to OFTOs for each of the tender rounds it has run to date.

Despite these risks, the assets benefit from the track record of an established regulator whose remit is being extended, rather than a newly-created regulator. As a result, there could be first-mover advantages for those who are willing to lead the charge.

Commercial realities triggering an extension of regulation

Changes to regulation or applying separate treatment to specific assets may not be the only way that regulatory arrangements create new opportunities for investors. Commercial conditions might also trigger the extension of regulation to new assets.

For example:

- > The spinning out of oil and gas pipelines and storage facilities by some oil majors could conceivably create a new class of essential infrastructure requiring regulatory oversight to ration access to the facilities on commercial terms.
- > Major greenfield investments, such as new transport links or airport expansions, could require bespoke regulatory arrangements to get these projects off the ground, especially when they are undertaken by a regulated entity, as was the case with Thames Tideway.
- > The uncertain outlook for the role of gas in the European energy mix and where reserves might come from means that there is uncertainty about the demand for much of Europe's existing gas infrastructure. Some LNG terminals, storage facilities and interconnector pipelines may look to regulate revenue streams as a means of mitigating risk and safeguarding investments. Governments may see the value of enhanced security of supply in a volatile market place.

> The EU's 4th Railway Package (as mentioned on page 18) could see the emergence of new TOCs and ROSCOs across continental Europe, both of which might be subject to some form of economic regulation at some point in the future.

While much of the above is speculative, there are some concrete examples too. One such example is the Irish energy regulator's recent consultation on the appropriate regulatory framework to apply to merchant gas pipelines connecting offshore fields to the onshore gas transmission network. The Commission for Energy Regulation (CER) has proposed adopting an annuity approach to setting access tariffs - which has some similarities to the OFTO regime - in an attempt to mitigate risks which might otherwise disincentivise investment in future gas pipelines. Given that these assets are not underwritten by customers, the CER does not need to determine an allowed revenue in the same way it would for fully regulated assets.

Whether regulation will ultimately be extended to new sectors and assets depends on a range of factors, not least the routes governments choose for delivering future infrastructure needs. However, the possibility that regulation could be extended suggests that investors contemplating investing in currently unregulated infrastructure will need to be mindful that new and existing assets might come under the umbrella of regulation at some point in the future. ■



INVESTORS SHOULD CONSIDER THE RISK-RETURN TRADE-OFF WHEN INVESTING IN AN ASSET CLASS WITH NEW REGULATORY ARRANGEMENTS WHICH HAVE BEEN SET BY AN ESTABLISHED REGULATOR. DESPITE UNCERTAINTY REGARDING THE NEW ARRANGEMENTS AND HOW THEY WILL BE APPLIED, THE FACT THAT THEY ARE BEING SET BY A REGULATOR WITH A STRONG TRACK RECORD, ALBEIT IN RELATION TO ANOTHER ASSET CLASS, SHOULD GIVE COMFORT AND MIGHT ALLOW FOR 'FIRST-MOVER' ADVANTAGES.

Stuart Rowson

Linklaters partner, London

REGULATORY RISK ANALYSIS

OBJECTIVE MEASURES OF THE DIFFERENT ASPECTS OF REGULATORY ARRANGEMENTS DON'T REALLY EXIST, SO WE'VE TAKEN A VIEW ON THE RELATIVE STRENGTHS AND WEAKNESSES OF DIFFERENT REGIMES AND HOW THEY'VE EVOLVED OVER TIME. WHILE WE CONSIDER THESE ASSESSMENTS TO BE REASONABLE BASED ON OUR RESEARCH AND EXPERIENCE, THERE IS NO SINGLE 'RIGHT' ANSWER AND EVERY INVESTOR WILL HAVE A DIFFERENT PERSPECTIVE ON THE REGULATORY ARRANGEMENTS APPLICABLE TO ANY GIVEN SET OF ASSETS IN ANY GIVEN COUNTRY, REFLECTING THEIR OWN PREFERENCES AND EXPERIENCES.

Anthony Legg
Director, FTI Consulting LLP

For this report, Compass Lexecon and FTI Consulting have developed a Regulatory Risk Analysis that evaluates









































































the attractiveness of a range of assets, both before and after recent changes to economic regulation and the political environment. By comparing the differences in the regulatory environment, we can start to see the impact of the emerging trends we have discussed thus far in European infrastructure regulation.

This is of course just a snapshot in time and it does not provide a crystal ball for the future, but what it does highlight is that an understanding of the written rules, personalities and politics will be essential in navigating the evolving regulatory landscape – selecting the right investment for your risk profile and valuing targets appropriately.

Whilst some of the countries/assets selected have been subject to more challenging economic regulation and political environments in recent years, they still offer excellent investment opportunities, in some cases, setting the 'gold standard' for infrastructure regulation worldwide.

For a more detailed conversation about the analysis and advice on how to navigate the various regulatory challenges associated with each, please contact the Linklaters Infrastructure Team at infrastructure@linklaters.com

Regulatory Risk Analysis

ASSET	2013		2015		OVERALL CHANGE
	POLITICAL ENVIRONMENT	ECONOMIC REGULATION	POLITICAL ENVIRONMENT	ECONOMIC REGULATION	
 FRANCE AIRPORTS					
 FRANCE ELECTRICITY NETWORKS					
 FRANCE GAS NETWORKS					
 GERMANY ELECTRICITY NETWORKS					
 GERMANY GAS NETWORKS					
 SPAIN ELECTRICITY DISTRIBUTION					
 SPAIN GAS DISTRIBUTION					
 SWEDEN ELECTRICITY NETWORKS					
 SWEDEN GAS NETWORKS					
 UK AIRPORTS					
 UK ELECTRICITY NETWORKS					
 UK GAS NETWORKS					

Key



increasing stability/transparency of political environment/economic regulation



decreasing stability/transparency of political environment/economic regulation



no overall change in political environment/economic regulation

A large, stylized number '3' in a vibrant magenta color. The top horizontal bar of the '3' is broken into three segments, each containing a line of white text. The bottom curve of the '3' is a solid magenta shape.

CONCLUSION:

ROUTES TO

RETURN

As discussed in detail, and highlighted by our case studies and the Regulatory Risk Analysis, in recent years we have seen three key trends emerge. There has been a tightening of economic regulation in some traditionally more attractive destinations. Conversely, there is growing confidence in the market in relation to those destinations and assets deemed to be less investor friendly throughout the financial crisis, as a result of regulatory reform and reduced political risk. At the same time, we are seeing an emergence of opportunities, particularly in the UK, as regulation is applied to new asset classes that were not previously subject to economic regulation and regulation moves to deal with major capex projects within a ring-fenced asset.

At the macro level, we anticipate that the impact of these trends will result in:

1. Investors taking a more selective approach as to which infrastructure assets in which countries to pursue as a more nuanced view of regulatory arrangements across the continent emerges.
2. Some rebalancing of deal-flow across Europe away from regimes previously perceived as more supportive to those historically perceived as less supportive.
3. The emergence of different types of investors interested in new 'hybrid' asset classes and/or traditional infrastructure assets subject to greater risk/reward trade-off than previously.

From a commercial perspective, the trends identified clearly highlight the need for continued close scrutiny of regulatory arrangements on a case-by-case basis. Investors should be alive to new investment opportunities emerging as a result of incentives linked to the efficient operation of an asset and newly regulated infrastructure asset classes.

Expert legal advice can unlock opportunities in the most challenging regulatory environment or indeed, previously unexplored regulatory territory. Linklaters is at the forefront of regulatory developments across Europe, having advised on every single deal referred to within this report. We are often instrumental in delivering structures or financings around regulatory requirements. This experience gives our team a unique view of the regulatory landscape. As explored throughout the report, the evolution of regulation and the resulting key learnings span geographies and assets. Our knowhow, experience and relationships with regulators enables us to support clients in proactive horizon-scanning and developing an innovative approach to new assets and regulatory regimes.

We would be delighted to discuss the trends explored in this report and how they might apply to future investments opportunities. ■



OPPORTUNITIES WHERE THERE IS AN ALIGNMENT OF INTERESTS BETWEEN GOVERNMENT, BILL PAYERS AND INVESTORS ARE ATTRACTIVE, BUT WHERE THERE ISN'T AN ALIGNMENT OF INTERESTS THE REGULATORY ARRANGEMENTS NEED TO BE SCRUTINISED PARTICULARLY CAREFULLY.

Andrew Blincoe
RBS



LINKLATERS IS AT THE FOREFRONT OF REGULATORY DEVELOPMENTS ACROSS EUROPE, HAVING ADVISED ON EVERY SINGLE DEAL REFERRED TO WITHIN THIS REPORT.

APPENDIX: METHODOLOGY

Two core dimensions of regulatory arrangements, political environment and economic regulation, are considered as essential factors in attracting infrastructure investors. The scores assigned to each sector in each country, discussed further below, have been based on an evaluation of how each sector in each country performs against these dimensions and five key sub-categories.

Regulatory Risk Analysis methodology

Broadly speaking, the regulatory arrangements applied to any given asset can be evaluated along two core dimensions: (i) economic regulation – the approach and decisions of the economic regulator; and (ii) political environment – the attitude and actions of the government.

Each of these dimensions has been further disaggregated into five key areas: transparency, predictability, track record, investor friendliness and external pressures.

Each of these have been assigned a score between 0 (worst) and 10 (best), giving an overall score out of 50. The analysing before and after recent changes to the regulatory environment, and comparing the difference, the impact of the emerging trends in European infrastructure regulation can be tracked across countries and sectors.

Overview of the Regulatory Risk Analysis

CATEGORY	POLITICAL ENVIRONMENT	ECONOMIC REGULATION
Transparency	Is the legal framework in which the economic regulator and the regulated companies operate clearly stated and publicly available?	Are the regulator's decisions publicly available? Are they easy to understand?
	Are the government's decisions well-trailed? Does the government have a history of unplanned interventions/ interference e.g. windfall taxes, expropriation? Is there a stable government?	Are the regulator's decisions well-trailed? Does the regulator have a history of unplanned interventions/interference in the regulatory arrangements?
Track record	Has the government got a proven track record of supporting private investors?	Has the regulator got a proven track record of making reasonable decisions? Have the key individuals at the regulator been in their roles for a long period of time and are they known to have a reasonable approach towards investors?
Investor friendliness	Is the political party(ies) in power more or less likely to be investor friendly/pro-business? Is the government trying to encourage investment in infrastructure? Is there any evidence of a 'home bias' preferring local investors over foreign investors?	Does the regulator have a record of engaging with, and listening to, the views of investors? Have there been situations where the regulator has intervened to protect investor interests (to the short-run detriment of customers)?
	Are the finances of the government in a reasonable state? Is there pressure from voters over the cost of essential services?	Is the regulator demonstrably independent of the government and free of political influence/interference? Is there a history of the regulator's decisions being overridden by the government?
External pressures		

