Brexit Briefing

Timing, process, outcomes and implications for Power & Utilities sector

July 2016

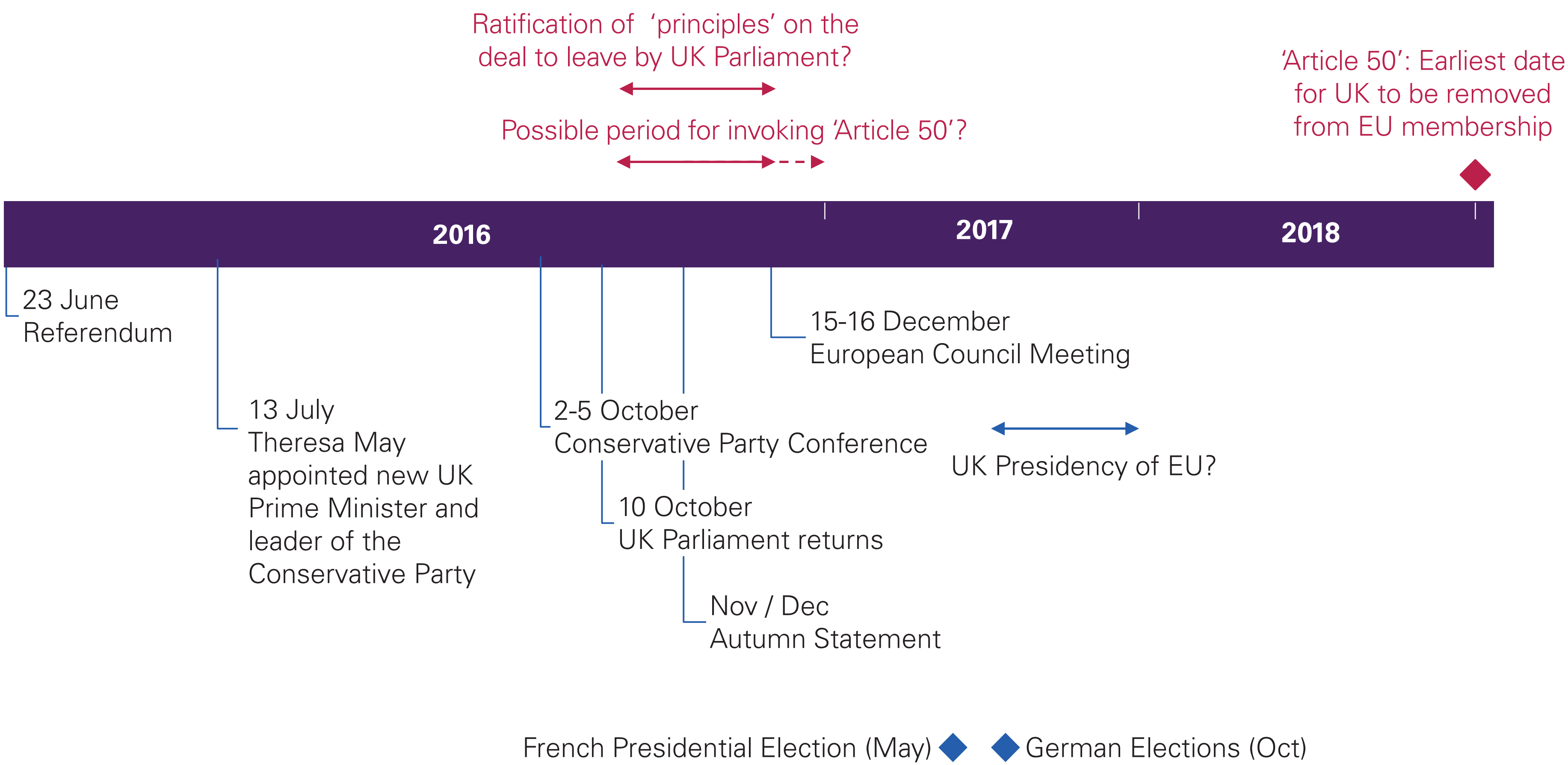
Overview

- EU legislation has a very significant impact on the Power and Utilities (P&U) sector. The GB energy market is also increasingly integrated with the Single Energy Market in Europe.
- The impact of Brexit on the P&U sector will depend on:
    - the new relationship the UK has with the EU, and
    - the make up of the new Government, whether there are changes to the direction of energy and climate policy; and whether policy decisions get delayed as resources in Government are diverted to the EU negotiations.
- The market fundamentals for P&U in the UK remain largely unchanged – the need for significant investment in the energy and water sectors, and the need (over the longer term) to decarbonise the economy, remain in place.
- The impact on regulated networks, or existing assets, will be less marked than the possible impacts on new investments. Much will depend on the confidence of international investors.
- KPMG has tools available to help *your* business think through and address the impacts (at: kpmg.com/uk/euref, in the 'EU Referendum Forum').

Timetable and UK/EU models

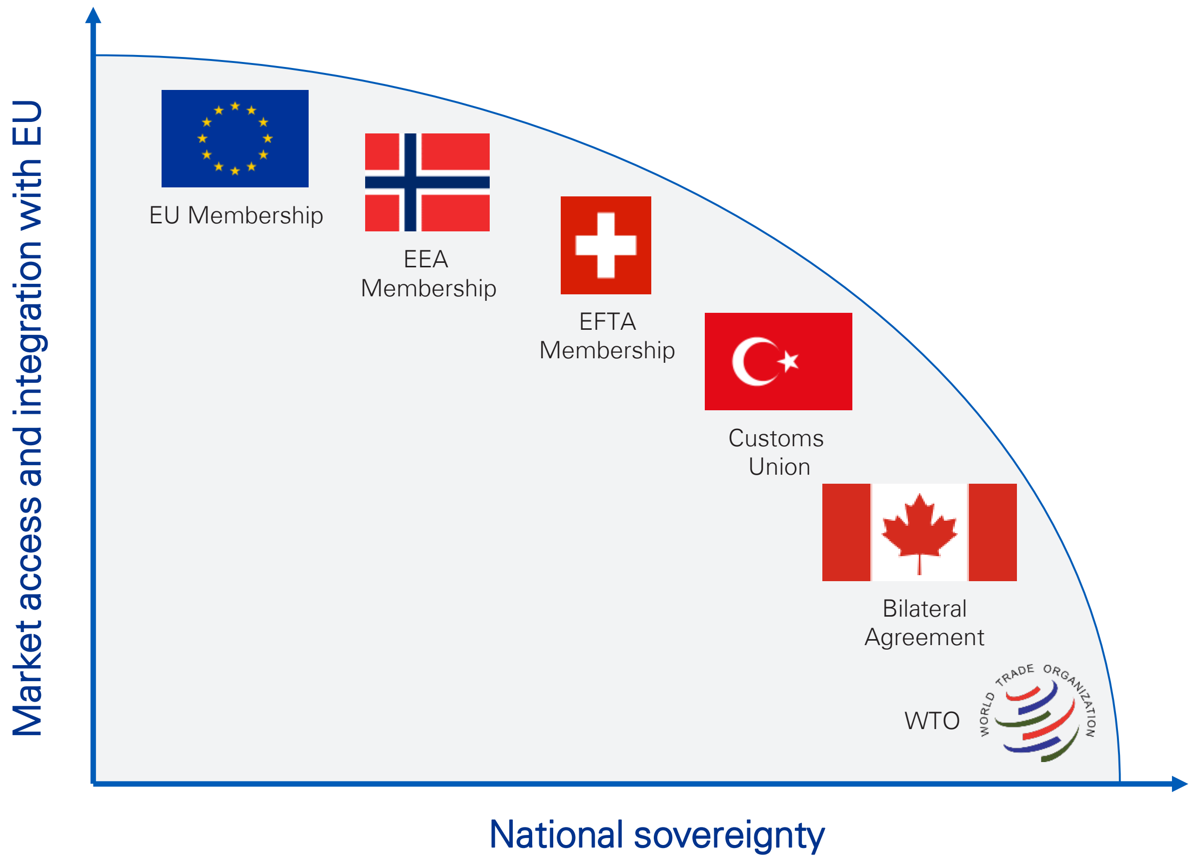
On 23rd June 2016 the UK voted to leave the European Union

Post the 23 June 2016 referendum, a possible timeline is shown below:



If leaving, what path will the UK follow?

There is likely to be a trade-off between access to the EU Single Market and UK sovereignty (e.g. freedom of movement)



Existing models the UK could follow…

Membership of EEA e.g. Norway

- Accept freedom of movement of people, in exchange for access to the Single Market
- Have to adopt EU rules without being able to vote on them
- Don't have access to 53 Free Trade Agreements with non-EU countries
- Customs checks do still exist
- Pays a substantial contribution to the EU budget
- Supervision by EFTA Surveillance Authority

Membership of EFTA but not EEA e.g. Switzerland

- Partial access to the Single Market; only limited access in services
- Bespoke agreements with EU for different sectors, each individually negotiated over many years
- Accepts free movement of people (in the case of Switzerland)
- Participate in EFTA free trade agreements
- Some contribution to the EU budget
- Supervision by EFTA Surveillance Authority

Customs Union e.g. Turkey

- Partial access to the Single Market, for some goods only, and not for services
- Participation in the EU Customs Union (must offer non-EU countries same trade terms as agreed with the EU)
- Required to enforce rules equivalent to those in the EU (competition, State Aid)
- No role in EU decision making and no contribution to the EU budget

Note: Turkey is being considered for EU membership

Bilateral Agreement e.g. Canada

- Free Trade Agreement, phasing out tariffs on industrial and most agricultural goods
- Intention to extend to services
- Trade bound by Rules of Origin; acceptance of EU rules when exporting to the EU
- No free movement of people; no contributions to EU spending

Note: Taken 7 years to negotiate, still not in force

WTO

- Default outcome if no other model is successfully negotiated
- UK would be forced apply WTO tariffs on imports and exports from/to the EU, and likewise for EU members
- Don't have access to 53 free trade agreements with non-EU countries
- No budgetary contributions or freedom of movement of people
- UK nationals lose right to live and work in the EU

Market access and integration with EU

National Sovereignty

…and possible alternatives?

Bespoke UK Model?

Could the UK negotiate a bespoke model that in some way maintains freedom of movement of goods and services without the freedom of movement of people?

Would this be acceptable to all 27 member states that would have to ratify the bespoke arrangement?

Remain?

EU moves on 'freedom of movement of people'

- If pro-'Remain' parties form the next Government on a clear mandate to remain in the EU, Article 50 would not be invoked.*

OR

Pro-remain parties win a general election

- Theresa May, the newly appointed UK Prime Minister will be expected to set out clear principles for negotiating the UK's exit from the EU, and can be expected to want a clear mandate from Parliament to negotiate on that basis.
- If defeated in Parliament, this could result in a vote of no-confidence resulting in a general election later this year, following procedure in the Fixed-term Parliaments Act 2011.
- If pro-'Remain' parties form the next Government on a clear mandate to remain in the EU, Article 50 would not be invoked.

Impact on the Power and Utilities sector

A) Potential macroeconomic impacts
B) Decarbonisation targets and EU Directives
C) Potential impacts on the Single Energy Market in Europe
D) Regulated networks and regulated utilities, including water
E) Financial and Safety Regulation
F) Workforce implications

EU law is very significant for the P&U Sector…

Examples of UK Legislation affecting the sector

Climate Change Act (including Carbon Budgets) – The first four carbon budgets leading to 2027 have been set in law. The Government has now agreed to the 5th carbon budget which requires a 57% reduction in emissions by 2030 on 1990 levels.

COP 21 Paris Climate Agreement – The UK was party to the Paris Climate Agreement but has not yet ratified it.

Competition Market Authority (CMA) inquiry – UK Government has agreed to implement the recommendations in full.

Competition Law – Prevents collusion and anti-competitive behaviour in the energy market.

Carbon Price Floor – Sets the minimum price on the cost of carbon, currently £18 per tonne of CO_2 in the UK.

Emissions Performance Standard (EPS) – To limit carbon dioxide emissions from new fossil fuel power stations. EPS has been set at a level equivalent to emissions of 450gCO_2/kWh for a plant operating at base–load.

Energy Act 2013 – Legislative base for Electricity Market Reform (Contract for Differences & Capacity Market) and future decarbonisation targets for power sector.

Fuel Poverty (England) Regulations 2014 – Requires subsidies to help those who are unable to afford to keep their home adequately heated.

Health and Safety at work Act 1974 – Places a duty on all employers to ensure the health, safety and welfare at work of all their employees.

Sustainability reports – Makes quoted companies required to report their annual greenhouse gas (GHG) emissions in their directors' report. e.g. FTSE Carbon reporting.

UK Corporate Governance Code – Sets standards of good practice in relation to board leadership and effectiveness, remuneration, accountability and relations with shareholders.

Examples of EU Directives/policies affecting the sector*

EU Renewables Directive – Requires the EU to fulfil at least 20% of its total energy needs from renewables by 2020. UK target is 15% of total energy by 2020.

EU Network Codes – Define the way electricity and gas is traded

Environmental and Energy State Aid Guidelines (EEAG) – Prevents State Aid from distorting competition in the internal market.

Large Combustion Plant Directive (LCPD), Industrial Emissions Directive (IED), Medium Combustion Plant Directive (MCPD) – Sets emission limits to address air quality issues.

Single energy market: Target model – Sets out the aim for a fully functioning, interconnected (current EU target of 10% by 2020) and integrated internal energy market. This also includes proposals for 15min settlements, not 30mins as in GB.

EU Emissions Trading Scheme (EU ETS) – Sets a cap and trade mechanism for greenhouse gas emissions.

Energy Efficiency Directive – Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020.

Third Package – Ensures the further liberalisation of European energy markets, partly by enforcing that Transmission System Operators (TSOs) are unbundled (or independent) from generation.

Habitats directive – Ensures the conservation of a range of rare, threatened or endemic animal and plant species, impeding infrastructure development.

EU Funding – inc. Common European Facility (CEF) & European Investment Bank.

Markets in Financial Instruments Directive (MIFID) – Governs the provision of investment services in financial instruments by banks and investment firms.

REMIT – EU regulation on energy market integrity and transparency in energy trading.

All EU Directives have to be transposed into UK law. So, in scrapping any commitments, the secondary legislation would need to be repealed as well

Macro impacts on the Power & Utilities sector…

Note: The impacts will be dependent on (a) the final model chosen for the UK's new relationship with the EU and (b) the make-up of the new Government post-September.

A) Potential macroeconomic impacts

- Currency: The **Pound has depreciated** since the result was announced. This does make UK energy assets cheaper for foreign investors, potentially **increasing the attractiveness of UK assets to foreign investors.** A lower Pound also **increases the price of imports** and inputs priced in foreign currencies (e.g. Dollar price of oil, electricity imports), and increases the competitiveness for UK exports.
- Inflation: **Inflation may rise** due to the increase in the price of imports. The Bank of England has a legal obligation to keep inflation as close to 2% as possible, so this may **cause an increase in interest rates over the medium term.** The UK's position on monetary policy will also be impacted by GDP growth.
- Economic growth: HM Treasury, the IMF and the Bank of England have forecast **reductions in GDP growth** over the medium term. This is contested by those who argued for leaving the EU. But, if growth is lower, it would have consequential impacts on **energy demand and investment in the UK**.
- Credit rating: The **UK's credit rating** being downgraded by the Ratings Agencies will affect the cost of government debt and may have an impact on investment. However, in the short term, Gilts may be seen as a 'safe haven' leading to lower yields.
- Commodity prices: Over the medium term, **the prices of commodities, like oil and gas, are determined by *global* demand and supply**, and trading with key energy suppliers like Norway and Qatar would continue even if the UK was outside the EU.
- Scotland: There would be major implications for the operation of the GB energy market **if Scotland then voted to leave the UK** on the back of a vote to leave. It could create prolonged uncertainty around the future of the North Sea basin, for renewables investment and interconnection with Europe.
- Investment: Much will depend on the impact on **confidence of international investors** in the UK energy market.

Macro impacts on the Power & Utilities sector…

B) Decarbonisation targets and EU Directives

- UK energy and carbon policy: On 29 June, Amber Rudd reaffirmed the UK's commitment to the Climate Change Act, carbon budgets, offshore wind, nuclear, closing coal-fired power stations, and the Single Energy Market; however, much will depend on the make-up of the new Government, potentially with a much stronger focus on security of supply and affordability, rather than decarbonisation.
- EU Directives, like the Industrial Emissions Directive (IED), or the 2020 Renewables Energy Directive which requires the UK to have 15% of its energy from renewable sources by 2020, may no longer apply. This could enable the UK to pursue a lower cost path to its 2030 and 2050 decarbonisation objectives.
- Renewables: This could make **support schemes** like the Renewable Heat Incentive (RHI), which are funded from general taxation, **vulnerable to cuts**. Levy-based schemes funded from consumer bills, such as Contracts for Difference (CfDs), would be more difficult to change given their contractual nature. The UK Government would almost certainly want to stick to the **principle of 'grandfathering' subsidies** already allocated to avoid further investment hiatus. This would mean limited impacts for *existing* projects. However, the new Government could cancel/delay *future* CfD allocations and change the pace of decarbonisation in the power sector.
- Carbon Budgets: The **UK does have its own domestic legislation requiring decarbonisation** in the form of the 2008 Climate Change Act and carbon budgets, which are legally-binding. The Climate Change Committee has recommended, and the UK Government has accepted, a 57% reduction in emissions by 2030 on 1990 levels. So, **unless this Act is repealed, the need for greater energy efficiency and more low carbon sources of energy (renewables, nuclear and in the longer-term CCS) would remain**, though perhaps with less urgency on renewables than is required by the EU 2020 target. Domestic legislation is also easier to repeal than EU Directives.
- Habitats Directive: The **removal of requirements from other Directives,** like the Habitats Directive, could allow easier development of infrastructure on and offshore. This could have implications for wind farm projects, solar farms, tidal projects, as well as the development of shale gas and carbon capture and storage.

Macro impacts on the Power & Utilities sector…

B) Decarbonisation targets and EU Directives (continued)

- EU State Aid requirements may no longer have to be met – allowing subsidies to be given to technologies the Government wanted to see developed, for example new nuclear, or new gas. However, restrictions or tariffs may be expected to ensure industries are playing on a ‘level playing field’ when trading with the EU. Countries within EFTA have to follow similar rules as the EU.
- International Agreements: The UK’s influence in shaping **future international agreements**, such as the Paris Climate Change Agreement, would be reduced. The balance of opinion *within* the EU on energy and climate issues could also shift without the UK present.
- EU funding: British energy and infrastructure projects would **no longer benefit from EU funding** e.g. from the ‘Connecting Europe Facility’ (CEF) or loans from the European Investment Bank (EIB). Those funds would be directed elsewhere in Europe.

C) Potential impacts on the Single Energy Market in Europe

- Single Energy Market **will probably still exist,** as this is in the interests of both the UK and the EU, so the trading of electricity and gas across borders would almost certainly continue along current lines, as it does between the GB market and the Single Energy Market in Ireland (which covers Northern Ireland too); or between the Nordpool market in Scandanavia and the rest of the EU.
- Network Codes: The **rules** determining how the **EU Single Energy Market** works could be changed in the future without any influence from Britain – e.g. a move to 15min settlements (current plan for the GB market is 30 minutes), or the establishment of a Single Energy Regulator across the EU, or a single Capacity Market for the EU. The UK has been at the forefront of arguing for market liberalisation over many years.
- EU Emissions Trading Scheme (ETS): If the EU ETS fails to deliver a robust carbon price, there may be increased pressure to reduce or remove the UK Carbon Price Floor, which would have an impact on wholesale prices in the UK.
- VAT: The Leave campaign did commit to removing **VAT on fuel and power**, which is currently set at 5% (the minimum under EU law). This would reduce energy bills.

Macro impacts on the Power & Utilities sector…

D) Regulated networks and regulated utilities, including water

- Regulated utilities are likely to be **less affected** than other parts of the P&U sector, assuming current regulatory frameworks (eg RIIO) remain in place.
- Inflation: Any **increase in inflation** would have a positive impact on cashflows of regulated utilities – there is an expectation of a rise in CPI inflation over the medium term.
- Credit ratings are key for regulated utilities financing; however, the UK losing its AAA rating is not expected to have a negative impact on utilities' ratings directly.
- EIB funding: Future availability of **EIB funding** may be a concern to some regulated utilities.
- Cost of debt is expected to increase, but availability of funding for Regulated Asset Based (RAB) businesses should remain largely unchanged. If interest rates rise, some highly leveraged companies might be affected because they already have limited financial headroom.
- Reform: The **speed of introducing some regulatory market reforms** in utilities may be impacted, e.g. RPI to CPI indexation.
- EU Directives: There are **some EU regulations** that directly affect the regulated utilities, e.g. European Water Framework Directive, and more generally environmental standards.
- Valuations and RAB premia may decrease slightly due to **macroeconomic and capital markets** impacts rather than business fundamentals.
- Future planned interconnectors may be less attractive because UK would no longer automatically be part of the EU regulatory framework for market coupling - to unify electricity trading and harmonise power prices across Europe.

Macro impacts on the Power & Utilities sector…

E) Financial and Safety Regulation

- Energy Trading: The EU has various measures which impact on **energy trading**, including: the Market Abuse Directive, the European Market Infrastructure Regulation (EMIR), the Markets in Financial Instruments Directive (MIFID and MIFID II) and the Regulation in wholesale Energy Market Integrity and Transparency (REMIT).
- Regulatory divergence could result in an additional burden by duplicating compliance and reporting requirements. However, it could also remove some less favourable regulations, as the UK has typically been keen to maintain a competitive edge in the financial sector.
- Safety regulation: The Offshore Safety Directive Regulator oversees the implementation of the EU Directive on the safety of offshore operations. However this Directive largely reinforces elements that are already covered by UK Regulations so there is unlikely to be any significant changes in this area.

F) Workforce implications

- Free movement of labour: The potential loss of this poses risks for the sector. It could reduce the pool of labour and increase the skills shortage, already being felt, especially in the more specialised parts of the sector (engineering and nuclear in particular) with the aging workforce. While labour could still move between markets, any restrictions or additional hurdles would add to costs.
- Skills shortages: On the other hand, there may be opportunities to **target skills shortages** required in the energy sector through the introduction of a points based immigration system, like that used in Australia.
- STEM: When looking at the next generation of **STEM students**, which are key to the Power & Utilities industry, consideration needs to be given to the impact on UK universities to attract EU students if the UK were outside the EU.
- HQs: Energy companies with **headquarters in mainland Europe** could come under political pressure to relocate jobs and investment away from the UK and to those countries remaining in the EU.

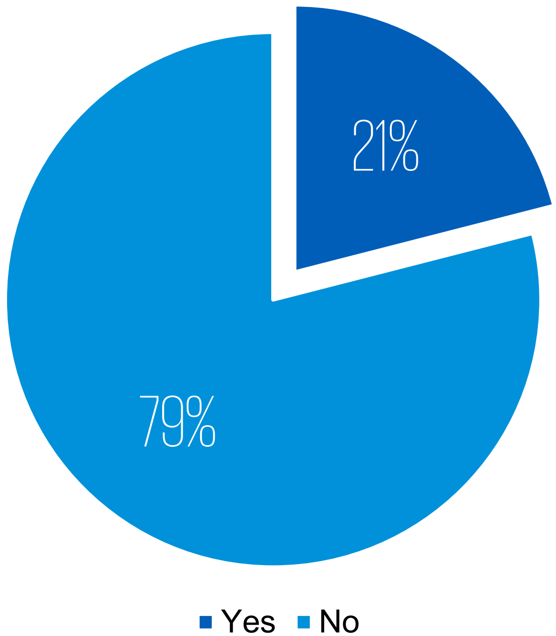
Impact on *your* businesses

Potential impacts on *your* business...

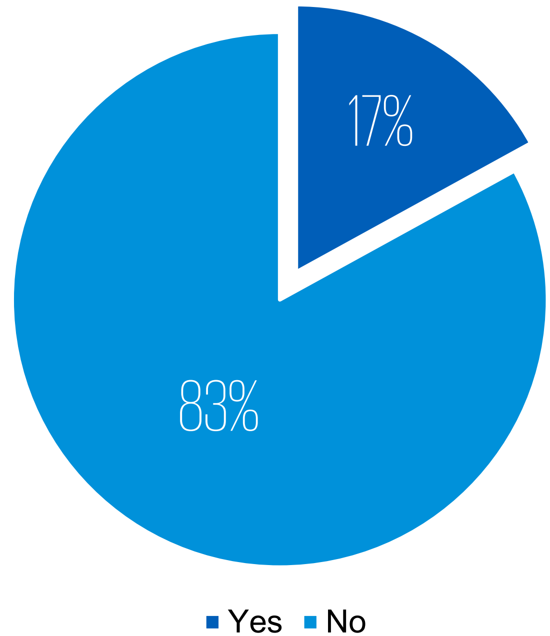
Financial performance outcomes	Business Model	Operating Model
• Financial targets, budgeting, cashflow and liquidity	• Markets, propositions, brands and clients	• Business processes, operational and technology infrastructure, organisational structure, risk and governance, people and culture
• Reforecasting and capital market guidance • Working capital, cash management and stress testing • Hedging and FX Budgeting • Measures and incentives • Cost of capital • Risk Management	• Changes in the UK and EU competitive landscape, as market access changes • Effect of removal of EU withholding tax directives may increase investor tax costs; Global tax developments would be implemented • UK law would now prevail with potential for VAT to diverge from EU rules (e.g. freedom to set lower VAT rate on fuel and power) • Potentially increase in administration costs of cross border goods flow • Changes in regulations eg environmental legislation • Impact of macroeconomic conditions	• Impact on availability of skills and resources • The automatic right to work in EU states will no longer apply for UK nationals • Some labour laws could be revised depending on the new Government • Transmission of data cross borders could be restricted, impacting processes and technology • New administrative functions for administering trade • Need to revisit all their contracts citing EU law • Cross border mergers could prove difficult
What is the short term exposure of your business?	How much do you depend on the European market? What new opportunities may arise?	What is the impact on your people, organisational design and processes?

Is this you?

Do you have a response plan?

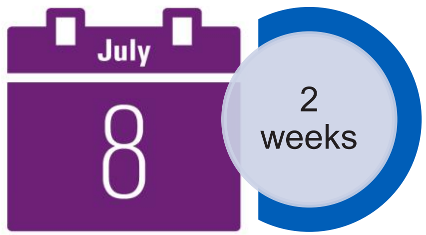


Have you formed a response team?



Sample of 177 responses from KPMG Brexit portal registrants, post Brexit vote

The KPMG 2 - 2 - 2 Response Plan



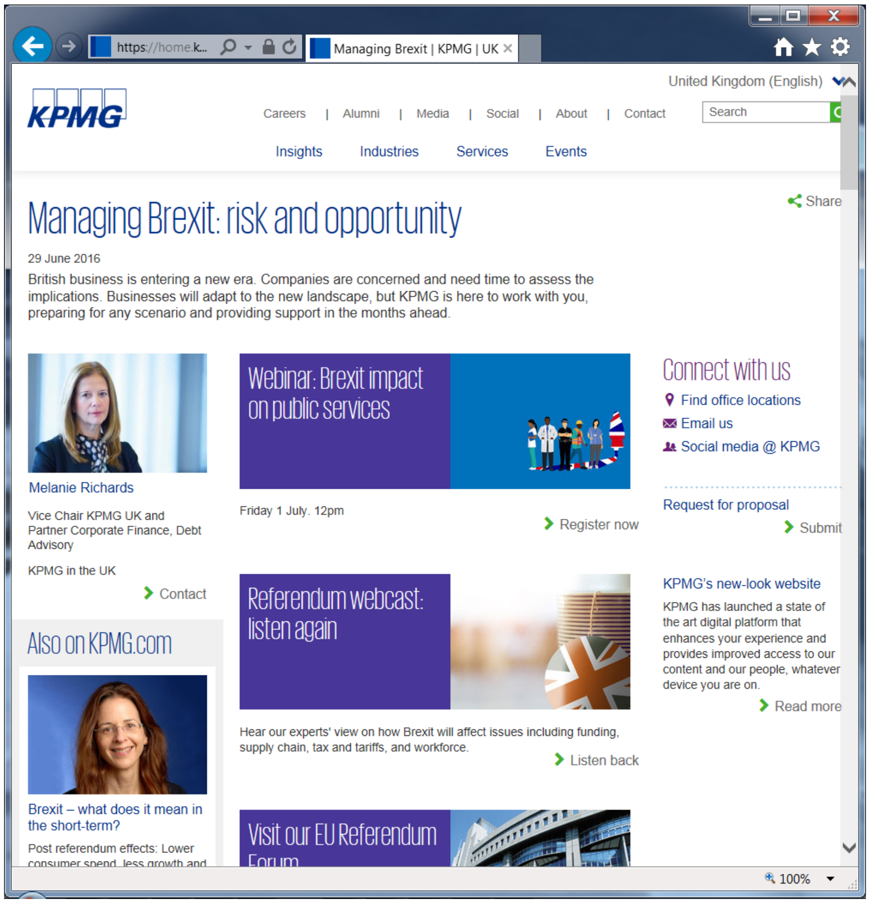
- Form Brexit Committee and operations Project Management Organisation (PMO)
- Determine and hedge cash position
- Communications plan – people, customers, suppliers, investors
- Contingencies in place
- Determine competitor exposure and opportunities
- Determine your own heatmap – to identify risks and opportunities

- Forensic top to bottom understanding of your business operations – driven by Brexit Committee and PMO
- Execute to mitigate risks
- Active capitalisation of opportunities
- Determine important negotiation factors and your industry position

- Develop and update strategic plan (markets, propositions, brands and clients) in line with expected opportunities and challenges
- Iterate to reflect developments in UK-EU negotiations
- Restructuring and build-up of operating model capabilities to 'win' post-Brexit

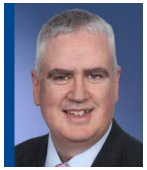
The KPMG Brexit Portal

Visit: kpmg.com/uk/euref



Visit the Forum to access materials available to help

Irish Team



Michael Hayes
Partner, FS Tax

E: michael.hayes@kpmg.ie
T: +353 1 410 1656
M: +353 87 744 1656

Ryan McCarthy
Partner, CIM Audit

E: ryan.mccarthy@kpmg.ie
T: +353 1 410 2330
M: +353 877 442 330

Eoin O'Lideadha
Partner, Corporate Finance

E: eoin.olideadha@kpmg.ie
T: +353 1 410 1349
M: +353 87 285 0087

Russell Smyth
Director, Corporate Finance Belfast

E: russell.smyth@kpmg.ie
T: +44 28 9089 3814
M: +44 77 3860 3869

Contacts page for more information

Power & Utilities team

Simon Virley CB
Partner & Head, Power and Utilities
T +44 (0)20 73115037
E simon.virley@kpmg.co.uk

James Maycock
Commodity and Energy Markets Risk and Regulatory
T +44 (0)20 7694 5560
E james.maycock@kpmg.co.uk

Andrew Lister
Head of Tax, Energy and Natural Resources
T +44 (0)207 694 3751
E andrew.lister@kpmg.co.uk

Economics team

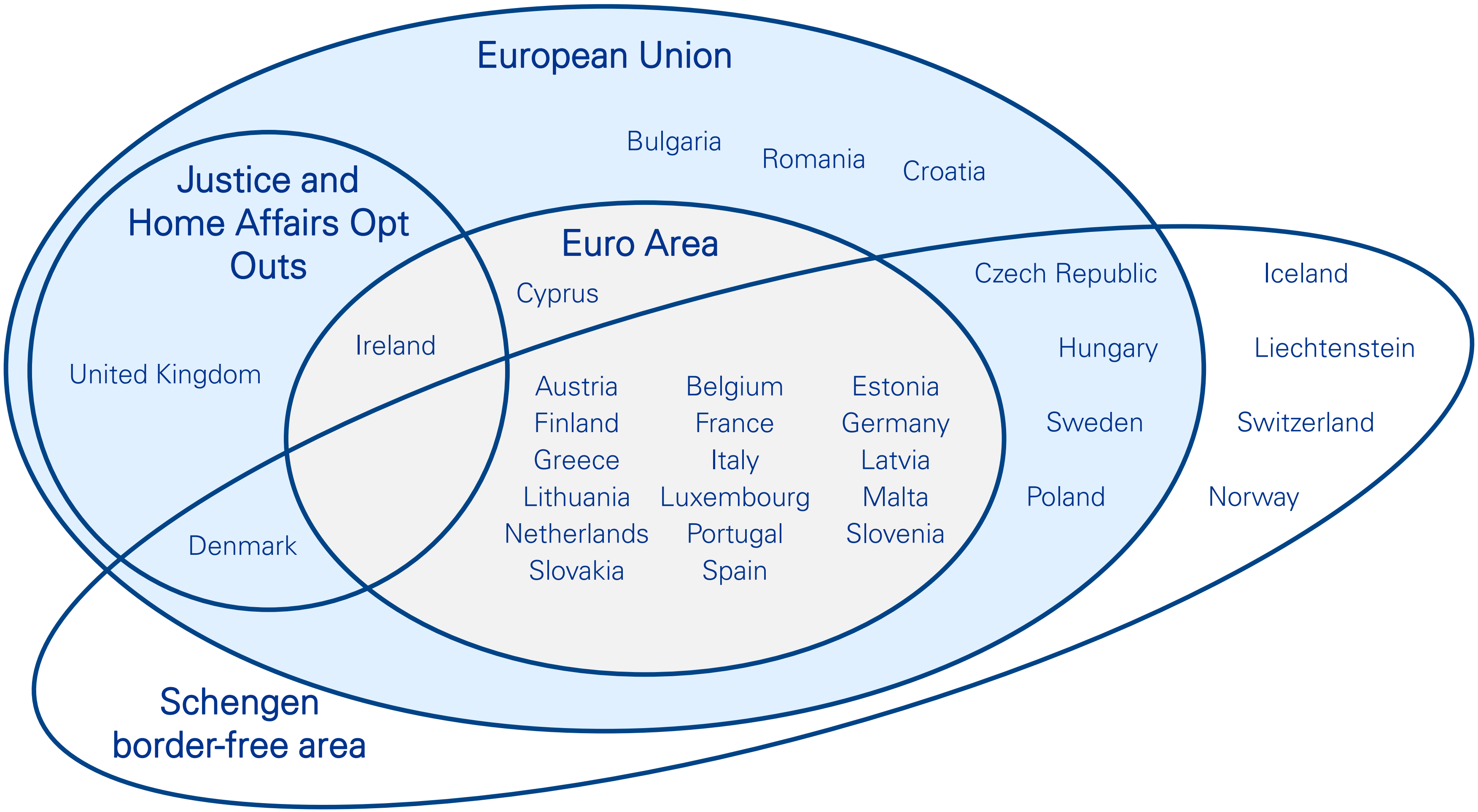
Simon Trussler
Head of Fiscal and Government Affairs
T +44 (0)20 7694 5497
E simon.trussler@kpmg.co.uk

Bill Robinson
Chief Economist
T +44 (0)20 7311 3515
E bill.robinson@kpmg.co.uk

Dan Aylward
Economics and International Development
T +44 (0)7557 316 505
E dan.aylward@kpmg.co.uk

Annex

Annex: Europe and the Europe Union



Source: Alternatives to membership, HM Government, 2016

Annex: Models of relationship to the European Union

Models of relationship to the European Union *(Alternatives to membership, HM Government, 2016)*

		Votes on EU law	Access to the Single Market in goods and services: Tariff-free trade	Access to the Single Market in goods and services: Customs Union and external trade	Access to the Single Market in goods and services: Level playing field for business	'Ever closer union'	Justice and Home Affairs (JHA)	Free Movement of People	Schengen border-free area	Contribution to EU financing	Eurozone membership
UK membership of the EU		Full	Full	Full	Full	None	Partial / voluntary / special arrangement	Full a)	None	Partial / voluntary / special arrangement b)	None
Standard EU membership		Full	Full	Full	Full	Full	Full	Full	Full	Full	Full
Norway (non-EU EEA)		None	Partial / voluntary / special arrangement	None	Partial / voluntary / special arrangement	None	Partial / voluntary / special arrangement	Full	Full	Partial / voluntary / special arrangement	None
Bilateral Agreements	Switzerland	None	Partial / voluntary / special arrangement	None	Partial / voluntary / special arrangement	None	Partial / voluntary / special arrangement	Full	Full	Partial / voluntary / special arrangement	None
	Canada	None	Partial / voluntary / special arrangement	None	Partial / voluntary / special arrangement	None	None	None	None	None	None
	Turkey	None	Partial / voluntary / special arrangement	Partial / voluntary / special arrangement	Partial / voluntary / special arrangement	None	None	Partial / voluntary / special arrangement	None	None	None
WTO		None	None c)	None	None d)	None	None	None	None	None	None

Legend	
Full	(green)
Partial / voluntary / special arrangement	(amber)
None	(red)

a) Free movement of people: at the 2016 February European Council the Prime Minister secured a new settlement that will enable the UK to have a new emergency brake to limit full access to in-work benefits by newly arrived EU workers for up to four years when they enter our labour market. This will be in force for seven years.
b) The UK receives a rebate on its contributions to the EU budget.
c) Except where the EU has bound tariffs at zero per cent in WTO commitments.
d) Except where the EU has made commitments under General Agreement on Trade and Services.

kpmg.ie