

Cynulliad Cenedlaethol Cymru | National Assembly for Wales
Y Pwyllgor Materion Allanol a Deddfwriaeth Ychwanegol | External Affairs
and Additional Legislation Committee
Y goblygiadau i Gymru wrth i Brydain adael yr Undeb Ewropeaidd| Implications
for Wales of Britain exiting the European Union
IOB 15
Ymateb gan Sefydliad y Peirianwyr Sifil Cymru
Evidence from The Institution of Civil Engineers Wales Cymru

The Brexit Infrastructure Group was established following the outcome of the EU referendum.

The group is gathering data and evidence on what it agrees are the fundamental issues facing the construction industry and infrastructure sector in order to inform the Brexit negotiation process. The group is liaising with politicians and civil servants and appointing other industry experts to assist them.

I would like to thank the External Affairs and Additional Legislation Committee for the chance to take part in this consultation.

Yours sincerely / Cofion Cynnes

Keith Jones
Director ICE Wales Cymru

Notes:

The Institution of Civil Engineers (ICE) was founded in 1818 to ensure professionalism in civil engineering.

It represents c91,000 qualified and student civil engineers in the UK and across the globe and has over 3,600 members in Wales

ICE has long worked with governments of the day to help it to achieve its objectives, and has worked with industry to ensure that construction and civil engineering remain major contributors to the UK economy and UK exports

For further information visit www.ice.org.uk and www.ice.org.uk/wales

About the Brexit Infrastructure Group

The Brexit Infrastructure Group was established by Sir John Armitt (the Institution of Civil Engineer's Immediate Past President) to ensure that Government negotiators are fully informed of the key issues that affect our ability to deliver infrastructure that supports a prosperous society and economy, both during and beyond the Brexit negotiations.

Leadership Board

The Leadership Board has been established to oversee the delivery of the group's work across the five work strands detailed overleaf in this document's executive summary.

Chair – Sir John Armitt (Institution of Civil Engineers)

Nick Baveystock (Institution of Civil Engineers)

Amanda Clack (Royal Institution of Chartered Surveyors)

Geoff French (Aecom)

Richard Laudy (Pinsent Masons)

Paul Nash (Chartered Institute for Building)

Mike Putnam (Skanska)

Nick Roberts (Atkins)

Scott Steedman (British Standards Institution)

James Stewart (KPMG)

Andrew Wolstenholme (Construction Industry Council)

Executive Summary

Following the decision to leave the European Union (EU), the Institution of Civil Engineers (ICE) convened experts across the construction industry and infrastructure sector to identify the challenges and opportunities for the UK' infrastructure in a post-Brexit world. They set out five areas for focus which are covered in this paper.

- Investment, financing and funding
- Skills and labour
- Research funding and innovation
- Standards and Codes
- Procurement

Investment, financing and funding

Brexit has created a complex period of uncertainty around Welsh / the UK infrastructure investment and delivery.

Governments should:

- Reaffirm its commitment to the National Infrastructure Delivery Plan and ensure that a stable pipeline of infrastructure projects remains in place.
- Seek to ensure that the UK remains an influential member of the European Investment Bank.
- Key stat:
 - During 2011-15 the European Investment Bank invested €29bn¹ with infrastructure receiving the vast majority of this capital:

Energy €8.2bn

Transport and telecoms €7.1bn

Waste, sewerage and urban development € 7.3bn

¹ EIB (2016) [The EIB in the United Kingdom](#)

Skills and labour

There is a skills shortage across the Welsh / UK's construction industry and infrastructure sector.

Governments should:

- Seek to retain access to high-skilled, low-skilled and unskilled labour that is required to deliver infrastructure and construction projects detailed in the National Infrastructure Pipeline.
- Key stat
 - In Q1 2016 around 9% (194,000) of the construction workforce in the UK were EU nationals². Regionally the figures are more pronounced with migrants comprising 54% of construction workers in London³.

Research funding and innovation

The Governments' industrial strategies represent opportunities to boost productivity in Wales and the UK's construction industry and infrastructure sector.

Industry should:

- Take a leadership role on innovation and digitisation in order to deliver smarter infrastructure networks across Wales and the UK.
- Key stat
 - The UK has achieved an excellent return on investment in EU research related activities, with a net gain of €3.4bn from 2007 to 2013⁴.

Codes and standards

Trading construction products and services between countries that subscribe to common standards and codes is cost and time efficient.

Governments should:

- Seek to ensure that [Wales in] the UK remains an influential member of relevant European standards organisations such as CEN and CENELEC.

² Office of National Statistics cited in House of Commons Library (2016) [Brexit: impact across policy areas](#)

³ Rolfe and Hudson- Sharp (2016) - [The impact of free movement on the labour market: case studies of hospitality, food processing and construction](#)

⁴ House of Lords (2016) [Science and Technology Committee - EU membership and UK science](#)

Procurement

Common regulation governing procurement helps ensure competition, guard against fraud, underpin corporate governance requirements and provide value for money.

Governments should:

- Establish a specialist taskforce to look in depth at the long-term risks and opportunities of retaining articles set out in the European Procurement Directive through (Welsh and) UK law.

1. Investment, financing and funding

This section covers the investment, financing and funding strand by James Stewart at KPMG.

Summary

Meeting Wales and the UK's social and economic infrastructure needs requires both public and private sector investment. The assets the sector delivers and maintains across Wales and the UK are needed to drive economic development and productivity growth in the post-Brexit environment. These same assets also provide stable sources of income for the pension funds of millions of Wales and UK citizens.

The market is currently functioning well. Liquidity is high and Wales and the UK is home to an internationally recognised centre of excellence for the design, delivery and operation of social and economic infrastructure. This includes the capacity and capabilities of the engineering, legal, financial and advisory communities. Historically low interest rates make this an attractive period for further investment.

Brexit does create risks that could damage this source of competitive advantage for Wales and the UK. Political and policy uncertainty could combine with impending changes to financial regulation and uncertainty around the future role of the European Investment Bank (EIB) to reduce our attractiveness as an investment location and fragment our world leading delivery capability.

The Autumn Statement is an immediate opportunity to signal intent. Longer term infrastructure should be at the heart of Governments' new industrial strategy and this should include maintaining the health of the infrastructure supply chain.

What do we need to achieve?

We need to secure

- Market confidence that Wales and the UK remain an attractive location for infrastructure investment over the long term.
- A stable pipeline of infrastructure projects linked to long-term political objectives during the run up to the Brexit negotiations and beyond.
- Continued high levels of liquidity for debt and equity linked to Welsh and UK infrastructure.

To allow us to

- Maintain capacity and capability in Wales and the UK to support new build and enhancement of infrastructure assets and networks of all sizes.
 - This can in turn
 - Support economic growth, productivity improvement and transition to low carbon economy
 - Provide a source of high value exports

How can we achieve these outcomes?

Political commitment and a supportive policy environment

Wales' and the UK's stable legal and regulatory environment has been a key contributor to its attractiveness to investors, notably in the regulated utility sector. Adherence to the EU's legislative and regulatory framework has also provided clear signals of intent in riskier areas e.g. clean energy.

Governments should make early and sustained commitments on its infrastructure development agenda. Building on the Hinkley and Heathrow decisions, this could include:

- Making investments in other sectors where there is an established need and smaller scale programmes could be delivered at a greater pace. This could include interventions in social housing, roads, universal provision of broadband and flood risk management.
- Committing to follow the advice of the National Infrastructure Commission and reaffirming the importance of the UK Guarantees Scheme and the National Infrastructure Delivery Plan together with firm stable policies from the Welsh Government.
- A commitment to avoiding unnecessary policy innovation. The diversion of governments' time and resources to the Brexit negotiations does create a risk that well-meaning, but inconsistent policy proposals are not properly scrutinised. Similarly in the utility sector, we should be aiming for a period of regulatory stability during what will inevitably be a period of high uncertainty.

Taken together this will provide the infrastructure pipeline with the stability and confidence to maintain investor confidence in the short-term.

European Investment Bank

The EIB invests heavily in the UK economy. During 2011-15 it invested €29bn⁵ with infrastructure receiving the vast majority of this capital:

- Energy €8.2bn
- Transport and telecoms €7.1bn
- Waste, sewerage and urban development € 7.3bn

It will be very difficult for the UK to create a similar development bank without taking further liabilities on to the national balance sheet.

The EIB has in effect been a source of cheap finance for UK projects. In addition, by acting as an *anchor investor* it has been able to bring in other sources of funds for projects that would have struggled to reach financial close. It has also played a vital role in periods such

⁵ EIB (2016) [The EIB in the United Kingdom](#)

as the immediate aftermath of the 2008 financial crisis where private investment has largely dried up.

There are however legitimate concerns that in periods with a more benign financial climate the EIB has made investments in the UK that have crowded out commercial banks and institutional investors, with a negative impact on the long term capacity and capabilities of the sector. Action can include:

- Commit to continued UK membership of the EIB
- Develop a clear policy on optimising the roles of the EIB and private sources of finance such as the Commercial Banks and institutional investors within the domestic market.

Banking regulation

- An anticipation of developments around Basel III and Solvency II regulatory guidance would assist the UK to supplement the environment and should encourage increased capacity from the commercial bank and institutional market that, in turn, would address shortfalls arising from a lower EIB financing contribution to Welsh / UK infrastructure.

Linked Issues

Impact of weakened Sterling

The decline in the value of sterling does create a risk of creeping unaffordability of some key projects. For example, the majority of offshore winds projects rely on turbines priced in Euros.

Labour and skills

There is an established pattern within the construction sector of labour force attrition created by high levels of cyclicity of demand. For example, during the last recession it is estimated that around 400,000⁶ were lost across the construction industry. In a worst case scenario, a decline in the infrastructure pipeline combined with uncertainty over the immigration status of significant a proportion of the labour force could damage the ability of the UK to deliver affordably large projects and programmes as they become available.

Conclusion

In conclusion, for Wales and the UK to retain an active and efficient market for private investment in infrastructure, Governments will need to act promptly to demonstrate their commitment to delivery of a strong pipeline of infrastructure projects and the industry that helps to deliver them. They will also need to reconfirm their commitment to existing projects.

⁶ CIOB (2015) [CIOB Perspectives: an analysis on migration in the construction sector](#)

2. Skills and labour

This section covers the skills and labour strand led by Amanda Clack at the Royal Institution of Chartered Surveyors.

Summary

A number of factors have contributed to the skills shortage in the construction sector including cyclical construction industry workload, a risk-averse culture, its demographic makeup and its business model. This is not conducive to skills development.

Brexit presents an additional layer of complexity to this problem. In the long term, with effective partnership between government and industry we can address these skills challenges. However, in the short to medium term, it is critical that we have access to skills from overseas in order to deliver against the commitments for infrastructure, housebuilding and broader construction.

Wales and the UK construction sector skills profile - Impact of Brexit

Losses suffered in the recession, coupled with a lack of diversity and aging workforce work are holding back the sector. We have yet to recover fully the 400,000 construction sector jobs lost in the recession. Moreover, 430,000 are set to retire⁷ between 2010 and 2020 as the industry faces an ageing workforce with around 30% being over 50⁸. The sector is at a 'skills cliff edge' with numbers of new entrants failing to offset those retiring. Upskilling the existing workforce to utilise new technologies, to increase productivity and retain expertise will help to soften the impact but this will not resolve the underlying issues.

The industry is finding it difficult to attract new talent, particularly women and minority groups. CITB⁹ estimate that more than 230,000 new recruits will be needed between 2016 - 2020 to meet expected construction demand, that's not factoring losses due to retirement. The long timescales involved in training new construction workers means the short to medium term outlook for Wales and the UK in meeting its skills need is bleak.

Moreover, the skills profile varies by trade. For example, anecdotally, the majority of plumbers are EU national whilst a majority of electricians are UK national. This complicates the way in which skills issues should be addressed. General industry figures do not accurately capture the extent of the skills shortage in certain trades. A project with shortfall in just one key skill area will be delayed as a result.

Brexit exacerbates the issue leading to increased uncertainty not only to existing EU migrants, but also the potential to attract future talent. The ONS figures¹⁰ suggests that in

⁷ UK Commission for Employment and Skills (2012): [Sector Skills Insights - Construction](#)

⁸ DWP (2015) [DWP: Statistics on workers by sector](#)

⁹ CITB (2016) [Industry Insights - Construction Skills Network Forecasts 2016 -2020](#)

¹⁰ Office of National Statistics cited in House of Commons Library (2016) [Brexit: impact across policy areas](#)

Q1 2016 around 9% (194,000) of the construction workforce in the UK were EU nationals. Regionally the figures are more pronounced with migrants comprising 54% of construction workers in London¹¹. This will mean that the impact of Brexit will be felt unevenly between urban and rural communities.

The RICS' Construction market survey data show that skills shortages remained one of the main factors' surveyors felt was impeding growth. The UK's capacity to deliver on housing and major infrastructure projects will be reduced by at least 9% (more in London) if the skills issue is not addressed. This comes at a time where the UK government aims to double housing delivery and embark on a series of large scale infrastructure projects. Separately, there are indications that construction firms have had to delay starts or turn down work due to a shortage of staff.

Governments policy

The UK Government's ambition for 3 million new apprenticeships in this Parliament, and the introduction of degree equivalent apprenticeships, are laudable. Similarly, the Welsh Government's targets for Apprenticeships are laudable and welcomed. However, although attracting the 865,000 16-24 year olds who are not in education, training or employment¹² can go some way to reaching the target, government and industry must find a way to convince a significant proportion of school leavers to opt for apprenticeships over a degree.

The introduction of the apprenticeship levy also presents a challenge to the sector. Apprenticeships on offer do not meet the needs of industry as a whole as skills are often too specific to firms providing the training. In addition, the costs of training some construction workers are more than the proposed allocated funding cap under the new levy arrangements. For example a steeplejack apprenticeship was allocated £6,000 but industry estimates that it actually costs £20,000¹³. This has led to concerns that our industry might lose out if funds raised through the levy aren't ring fenced. Given the uncertainty and tight timescales for implementation the UK Government should delay the introduction of the levy until 2018 to develop programmes to deliver the skills we need.

The UK Government also intends to provide a long term forward view of projects and programmes through the National Infrastructure Delivery Plan, the National Infrastructure Commission and in the National Infrastructure Plan for Skills. Similarly, the Welsh Government is currently consulting on proposals for a Welsh Infrastructure Commission (there is a pre-existing WIIP). Delivery of infrastructure projects, some identified as UK and potentially Wales nationally significant, will be severely constrained due to a lack of skills.

¹¹ Rolfe and Hudson- Sharp (2016) [The impact of free movement on the labour market: case studies of hospitality, food processing and construction](#)

¹² House of commons library (2016) [NEET: Young People Not in Education, Employment or Training](#)

¹³ Build UK (2015) [Build UK Response to Apprenticeship Funding Consultation](#)

Solutions and recommendations

- **We must secure the rights of the existing EU workforce in the Welsh and the UK construction sector.** This must be done in conjunction with development of a workable skills based migration system that provides access to skills. One of the easiest ways in which this can be done is by offering non-UK construction students opportunities to remain and work in the sector for a set period of time following the completion of studies.
- **A long term programme is needed to evolve skills and practices in line with cultural and technological change to attract a diverse workforce, reduce the intensiveness of labour and change industry skills needs.** This involves developing means to upskill an ageing workforce to managerial/consultancy level (or acting in a more formal mentoring capacity) to retain valuable skills and expertise, understanding and supporting (or accelerating) investment in emergence of new technologies and their impact on skill (e.g. potential for cross industry recruitment from manufacturing, IT and design) and redesigning apprenticeship schemes to deliver multiple and transferable skills in response to industry demands.
- **A new pathway for entry into the sector at a post-graduate level for established professionals wanting to transition into the construction sector. With appropriate levels of higher apprenticeship funding.**

Successfully resolving our skills issues would make [Wales and] the UK a world leader in the field of technical construction expertise, which could significantly strengthen our position as an exporter of skills and services.

3. Research funding and Innovation

This section covers the research funding and innovation strand led by Mike Putnam at Skanska.

Summary

- Brexit negotiations: identifying the most significant threats and opportunities to the health of the built environment innovation system arising from the UK's Brexit negotiations.
- Industrial strategy: identifying opportunities to develop the built environment innovation system to support the UK's post-EU industrial strategy.

Wales and the UK construction's challenges

The construction industry is almost unique in not having seen productivity gains in recent decades, even though the quality of completed construction projects has steadily improved. We know also that the size of the UK construction market is set to grow by 35% over the coming decade. If we factor in the existing skills gap, with KPMG identifying a training deficit of 51%¹⁴, it's clear that the Wales and the UK will not be able to produce the required output at the current rates of productivity.

Industrial strategy for construction

In 2013 the UK Government and the industry published their 2025 strategy for construction¹⁵, setting targets of 33% lower costs, 50% faster delivery, 50% carbon reduction and 50% increase in exports. The benefits to the economy and to society of achieving these targets are well understood. But they cannot be achieved without innovation.

Barriers to innovation

Currently, the construction industry is not sufficiently well structured to deliver innovation without government support, due to fragmentation, uneven workflow and low profit margins. Funding for collaborative research overcomes these barriers.

Recent progress

Recent technological advances have paved the way for a leap forward in construction productivity. The support received to date from Innovate UK, R&D tax credits and EU programmes such as Horizon 2020, has already helped produce some excellent results. Improvements will come from advances in automation, digitisation, supply chain logistics,

¹⁴ KPMG (2014) [Skills to build](#)

¹⁵ BIS (2013) [Construction 2025: strategy](#)

process automation and smart infrastructure. UK firms have been involved in much successful collaborative research¹⁶. Government support has played an important part in bringing this about. Continuing support for construction-related research is essential to help achieve the 2025 targets, but there is also a need to develop an innovation culture in the industry.

EU grant funding

Evidence shows that the UK has achieved an excellent return on investment in EU research related activities, with a net gain of €3.4bn from 2007 to 2013¹⁷. Similar return is of course applicable in Wales. Construction-specific research is difficult to separate out, as there is often crossover with other industry sectors, but we also expect the transfer of knowledge into construction from other sectors to become increasingly important. Therefore the UK Chancellor's commitment to guarantee EU-funded project work, including research and innovation, up to 2020, regardless of whether we have departed the EU by then, is welcome. It's a positive sign. But, as an industry, we must ensure that innovation delivers the productivity gains and return on investment that will justify government support beyond the end of the decade.

Risks to academia

Perhaps the greatest risk of Brexit to construction research comes from threats to academia. Applications are down and given the uncertainty, EU countries and organisations are more wary of involving Wales and the UK in future projects. There are also major concerns around the free movement of people. Universities are already seeing applications from the EU dropping quite markedly. Construction research benefits from the impressive capabilities of our universities. A decline here would have significant consequences.

Building on Wales and the UK strengths

In addition to continued involvement in EU research, we should take the opportunity to build on the strong position of Welsh and UK construction. The UK's balance of trade in contracting and consultancy is already positive. Our leading position in digitisation and smart infrastructure represents massive opportunities, not only to Wales and the UK construction industry and the delivery of projects, but also as a highly exportable area of expertise. This is already recognised in the Construction 2025 strategy and within the current focus of the Construction Leadership Council. But there is much to do and a serious need for the industry to truly collaborate to make it happen with scale.

¹⁶ Such as flexible factories, tagging and tracking of components, condition-based maintenance, gamification of construction design, and more

¹⁷ House of Lords (2016) [Science and Technology Committee - EU membership and UK science](#)

Leadership opportunity

We have a tremendous opportunity to transform our industry in terms of productivity by encompassing digitalisation and innovation. Leadership will be crucial to ensure that clients and contractors, together with universities and consultants, work effectively together to make real progress. Continuing Governments support for collaborative research, in Wales and the UK and across Europe will provide that leadership.

4. Codes and standards

This section covers the codes and standards strand led by Scott Steedman at the British Standards Institution.

Summary

This paper addresses potential impacts of Brexit on the use of industry consensus technical codes and standards. It highlights key issues for Brexit negotiations and future opportunities. To bring the maximum benefit to Wales and the UK economy, BSI believes its full membership of the European standards organisations should be maintained post-Brexit.

Background

What are standards?

Standards are documents that set out specifications, codes and guidance for industry. They are distinct from regulation, because they are not issued by government and are not compulsory.¹⁸ They are developed consensually, through processes managed by independent standards organizations, in the Welsh / UK's case the British Standards Institution (BSI). The built environment sector has perhaps the longest history of any industry when it comes to the use of formal codes and standards.

Europe and the single standard model

Currently, [Wales and] the UK has full membership of the European standards organizations, CEN and CENELEC¹⁹ through BSI. This gives Wales and the UK experts considerable influence on the content of European standards. European standards have to be implemented (adopted) identically in 33 countries²⁰ by their national standards bodies. Any conflicting national standards must then be withdrawn, leaving a single standard across Europe for each aspect of a product or service where a standard is needed. This is known as the 'single standard model'. European standards are widely used: for example, the suite of Structural Eurocodes is currently used by some 500,000 engineers across Europe.

Membership of CEN and CENELEC is not contingent on being a member of the EU, but it is dependent on meeting those organizations' rules. Leaving the single standard model would lead to a loss of competitiveness for the UK construction sector and increased costs. Wales and the UK industry would still have to use European standards when exporting to the EU, while it would lose influence at regional level on the development and maintenance of those standards.

¹⁸ It should be noted that standards can often be used as a means of demonstrating conformity with regulation, and approximately 20% of current European standards enable compliance in this way.

¹⁹ CENELEC is the European standards organization in the electrotechnical area, CEN for all other sectors save telecommunications. Decisions to adopt standards are made by weighted vote, similar to the EU Treaty.

²⁰ EU 28, Iceland, Norway and Switzerland in EFTA, Turkey and the Former Yugoslav Republic of Macedonia.

Potential impacts on Wales and the UK infrastructure and supply chain of Brexit in terms of codes and standards

If Wales and the UK were no longer able to continue as a full member of CEN and CENELEC, negative effects would include:

- [Wales and] the UK would lose its decision-making power and influence over the content of European standards. This influence currently includes full governance rights, 70 technical body secretariats, and 566 technical committee chairs and working group convenors in CEN and CENELEC.
- [Wales and] the UK industry may be less commercially competitive. Industry would face either using two standards regimes (Wales / UK and European) or using European standards alone without being able to influence their content to any significant degree. Trading construction products between Wales and the UK and Europe will be made more difficult and costly if different standards apply in the respective jurisdictions.
- The possibility of fragmentation of the standards (and market) environment even within Wales and the UK, if any of the member countries of the Union retain European standards while others do not (note Scotland's express desire to remain within the EU); a particular issue for construction products.
- Confusion about the status of existing regulations (or long-term commercial contracts) incorporating European standards.
- The reduced ability of Welsh and UK academics to deliver research impact, as standards enables research to be translated into industry practice and accelerate innovation.

Issues regarding codes and standards for Brexit negotiations

Although compliance is voluntary for the vast majority of European standards used by the sector, there are a few, such as the Construction Products Regulation (CPR), where use of the harmonized standards is mandatory²¹. Further, a large minority of European standards (about 4500 'harmonized' standards, just under 20% of the total) play a vital role to support legislation by providing a preferred method to deliver legal compliance.

The Brexit negotiations should consider the present and future role of technical codes and standards as follows:

²¹ CE marking is frequently confused with standards. The CE marking is in fact a declaration by the manufacturer that the product complies with relevant legal requirements (the CE marking is not a quality mark). The question of CE marking is therefore a regulatory matter, not a standards issue.

- With regard to post-Brexit national technical regulation: there could be a challenge to BSI's full membership of CEN and CENELEC if [Wales and] the UK deviated significantly from the current regulatory model (known as the New Approach or New Legislative Framework). That is not to say that the specific regulatory requirements have to remain the same post-Brexit.
- There would be some restrictions on [Wales and] UK negotiations for free trade agreements, in order to maintain the single standard model. There is a risk that trade negotiations with third countries could concede the 'mutual recognition' of that country's national standards as a means of compliance with [Wales and] UK practice. The recognition of other standards in addition to the European standards would fundamentally undermine the single standard model and could lead to BSI's full membership of CEN and CENELEC being challenged.

Issues regarding codes and standards for the longer term and [Wales and] UK industrial strategy

There are areas where the Wales and the UK's global and European leadership position and influence in the development and use of voluntary industry codes and standards may assist in bringing opportunities for Wales and the UK post-Brexit. A Cebr study (2015) found substantial economic benefits for industry through the use of standards, particularly in exports, productivity, innovation and GDP growth. We see major opportunities for Wales and the UK to exploit its global reputation for shaping business and industry standards through:

- Supporting industrial strategy in Wales and the UK: simplified national regulation relying on standards to provide technical specifications can enable the development of innovative products within a flexible regulatory environment;
- Standards can also accelerate the transfer of innovations from research to market; BSI and Innovate UK are already working with other innovation infrastructure partners on the role of standards in new emerging technologies and particularly in the future digital economy;
- Supporting trade with European partners: continued full membership of CEN and CENELEC would maintain Welsh and UK influence over the content of European standards, without necessarily being tied to European regulation;
- Supporting UK's international ambitions through embedding UK commitment to international standards in free trade agreements: international standards from ISO and IEC simplify international trade. Using UK's continued influence both in Europe and internationally, the UK could seek global collaboration leading to a greater alignment between international standards.

5. Procurement

This section covers the procurement strand led by Paul Nash at The Chartered Institute for Building.

Summary

The EU procurement directive covers all public sector procurement in member states. It defines processes, procedures and standards and is intended to underpin fairness so that businesses based in the EU have the opportunity to obtain public sector contracts in any EU country. It has been introduced formally into English and Welsh law through parliamentary legislation and through the Scottish parliament, so Brexit would only change procurement law if there was a decision / choice to do so.

Certainly most large businesses need clear and sensible boundaries for procurement procedures and processes. This helps ensure competition, guard against fraud, underpin corporate governance requirements, provide value for money and level the field in terms of the application of law on the ground.

Possible impacts of Brexit

Remaining in the single market would mean the current procurement processes and conditions remain. A Norwegian-style model of remaining in the EEA is conditional upon complying with much of EU legislation, including the procurement directives.

If the UK decides not to continue its membership of the single market, this will likely raise as many questions as it answers. These include:

- Would the UK restrict its public procurement to companies based in Wales and the UK and risk reducing competition and increasing the prices payable by public authorities for their goods and services?
- Will this disenfranchise Welsh and UK businesses from bidding for overseas work?
- The UK may well have to negotiate a series of bilateral agreements with current EU Members States and, though the EU Procurement Directive would not be mandatory, it is likely that something similar would be put in place. Currently in place is the Government Procurement Agreement (GPA), a product of the World Trade Organisation involving 46 of the largest global economies and to which the UK is currently a party by virtue of its EU membership. This opens up procurement markets to signatories of the GPA but, not surprisingly, entails compliance with rules and obligations which are essentially the same as those that apply under current EU procurement directives.

Although the exact visioning of public procurement and its future in the UK is uncertain, it is inevitable that there will continue to be a set of guidelines and rules which govern how public contracts are awarded. If Wales and the UK wish to continue accessing foreign

procurement markets and allowing foreign businesses to compete in domestic markets, it is likely that those procurement rules will be identical to, or at least very similar to, those presently in place.

Wales and the UK have a construction market with few, if any, barriers to entry for foreign companies seeking to operate in the UK construction sector. UK policy has been for the market to decide on competences, rather than the regulatory system. This is in contrast to the majority of (in fact almost all) EU countries where contractor and professional service registration is undertaken at a national level. Even the smaller Balkan and Baltic states have rigorous registration requirements for contractors and specialist contractors, as well as professionals. Whilst Brexit does not necessarily change this situation, there are implications in the long term that need consideration.

What do we need to achieve?

From outside the EU looking in – rather than simply looking out – there needs to be a focus about Brexit from the perspective of non-EU countries, as well as from EU organisations looking at the Welsh / UK market. The emphasis has so far been from Wales and the UK looking out, whereas there are serious implications from the opposite perspective. For countries who have invested and are investing in Wales and the UK, this no longer comes with the certainty that they will automatically have access to other European markets in the future; overseas countries are looking at how Brexit will impact them in the procurement of materials and services. There is a risk that political and policy uncertainty could weaken the Welsh / UK's prospects of expanding its positive balance in construction-related trade.

We need to define the scope of the construction sector using the UN International Standard Industrial Classification (ISIC) codes. As we know, the industry is not simply comprised of building or civil engineering contractors. We need to consider the implications for the Knowledge Intensive Professional Services (KIPS), for the material producers and the ancillary services, such as legal, IT, insurance etc. The implications across the sector are huge because of compliance, registration and the need to meet standards. Within the EU regulatory system, it is easier to receive approvals; outside the EU it may be more challenging and time consuming. For procurement, the codes and standards are very important and there will need to be a process for negotiation on these.

The biggest challenge with procurement is not simply the tendering rules for procuring and advertising bids. Full access implies continued compliance and application of EU legislation. If [Wales and] the UK wishes to bid on European public sector projects, it would have to abide by the EU rules, registration, and the legislation. In reality, however, Welsh and UK construction firms have not bid on many EU projects; KIPS are likely to face greater consequences and the impact on this sector needs consideration.

The link between procurement, codes and standards is also of crucial importance, particularly at the initial bidding stage. EU codes are disparate, with many countries

choosing not to fully adopt European standards. Despite this, it is unlikely that [Wales /] the UK will continue to have a place at the table for the harmonisation of standards across Europe; ultimately this will affect Welsh / UK procurement when selling goods overseas.

Overall, the procurement rules are crucial, as many bids are sought on the basis of EU compliance. In terms of next steps, we recommend that a group be formally established to discuss more fully the possible implications for construction.