

Institution of Civil Engineers (ICE) National Needs Assessment – Call for Evidence to be submitted by 5pm Monday 29 February 2016 at policy@ice.org.uk

This consultation response has been prepared by Barton Willmore LLP, an integrated planning and design consultancy, specialising in energy and infrastructure developments across the UK. Our responses are supported by data, case studies and citations where appropriate and focus on the spatial planning issues that affect national infrastructure needs.

Q. Do you agree with our proposed vision and outcomes? What amendments would you propose?

We agree in principle with the proposed vision and outcomes but consider that reference to the comprehensive decision making framework that will form a fundamental part of delivering the country's infrastructure, should also be referred to. Our suggested amendment in underlined text is as follows:

"The UK will, through a comprehensive decision making framework, invest efficiently, affordably and sustainably in the provision of infrastructure assets and services to drive the economic growth necessary to enhance the UK's position in the global economy, support a high quality of life and shift towards a low carbon future."

A comprehensive decision making process and clear strategy for UK infrastructure development will be essential to encourage confidence and certainty with investors, ensure consistency in decision making at all levels and will subsequently enable the expedient delivery of UK infrastructure projects.

Q. What will be the main drivers of demand for UK national economic infrastructure over the next 35 years that we should consider in our assessment?

The main drivers of demand for UK national economic infrastructure including water, waste, transport, electricity, gas, and digital communications over the next 35 years will be:



Population

including urbanisation and growth, the UK's aging population, changing family structures, life expectancy and migration



Technology

including accessibility to services, managing change, reliability and speed of connections, cyber security, operation and maintenance



Economy

including globalisation and international markets, specialist and knowledge based services, goods consumption



Climate

including sustainable development, the low carbon economy, energy sources, emissions reduction, managing natural disasters

Q. What nationally significant investments in capacity or changes in policy & regulation should we prioritise to deliver these outcomes and deal with these drivers of demand?

and;

Q. In what areas can demand management or other forms of behavioural change make a significant impact? What are the blockers and enablers for realising these opportunities?

The most significant investment should be in the upgrading of existing and the development of new transmission and distribution networks particularly for energy. Our experience with energy providers and local authorities indicates that existing national transmission systems are at capacity, and this has prevented new energy projects coming forward because the capacity is not there to accept the additional kWh that they can produce. As a priority, those systems which are at capacity should be upgraded and a national database might assist in the understanding and evidencing of this issue making it easier to explain the need to local communities and instill confidence in investors. Investment in energy storage would also help to increase our security of supply, give a second use to old infrastructure i.e. redundant oil fields, and make the UK more resilient to price fluctuations.

In respect of policy and regulation, there have been some substantial changes in legislation in the last decade relating to the delivery of nationally significant infrastructure. It was clear before the Heathrow Terminal 5 (T5) application which took eight years, £80m and a four year public inquiry to be determined, that the town planning system which at the time was largely legislated through the Town and Country Planning Act (1990), was not fit for large scale infrastructure projects. New legislation has since brought about change to the way national infrastructure applications are determined and delivered, for example, the Crossrail Act (2008) and Planning Act (2008). The concept of large diameter tunnels crossing under London go back as far as the late 1940's but it was not until 2001 that the Crossrail Project or the "Cross London Rail Links" project as it was known, gained momentum and support (although a 2004 proposal for a more ambitious "Superlink" scheme was rejected by Crossrail). It was not until 2005 that the Crossrail Bill was presented to Parliament, receiving Royal Assent in 2008 with construction starting in 2009 resulting in a period of determination similar to the T5 experience. This does even take into consideration the time it then takes to construct the infrastructure, meaning that all the while capacity is diminishing and need is increasing. This only further demonstrates the need for a national long term strategy that spans political cycles.

Similarly the Planning Act (2008) brought in the Infrastructure Planning Commission (IPC) which began operating in 2009 to determine nationally significant infrastructure projects (NSIP's). However the Coalition Government, through the Localism Act 2011, abolished the IPC transferring decision making powers to the State via the Planning Inspectorate (PINS) in 2012 instead forming the National Infrastructure Planning Unit (NIPU). Whilst many NSIP's are now determined within approximately 15 months, an improvement on the previous two year average determination period, the Development Consent Order (DCO) process is heavily frontloaded. It can take 12-24 months prior to submission to undertake consultation, surveys and write the application documents, meaning that a project is still likely to take around 4 years to be approved requiring significant finance, investor confidence, legislative and political stability in the interim albeit the decision making period is half that of the experience with T5 and Crossrail. Changes were again made to the NSIP process under the Infrastructure Act (2015) and further changes are expected during the 2015-2020 Government relating to European Protected Species Licenses, Welsh devolution and the removal of onshore wind

from the process returning decision making to local planning authorities. A national long term strategy that was based on evidence for infrastructural needs combined with an ethos that determining authorities should look for reasons to approve rather than refuse the application, would help speed up the process.

Some new hope for decision making on infrastructure comes in the form of the independent National Infrastructure Commission (NIC) which was announced by the Chancellor in October 2015 and was "set up to determine national infrastructure priorities and hold the government to account for their delivery". The NIC "will advise on the country's most complex infrastructure challenges by adopting a more long-term approach on infrastructure needs and provide robust, impartial analysis" (.gov.uk). A consultation on how the NIC should be structured and operated runs until 17 March 2016 and it is hoped that the NIC will make politically robust and evidence based decisions.

A mechanism that allows Applicants to pay for faster decisions would also be a beneficial method for ensuring the expediency of decisions for planning applications, with public bodies often having limited financial and therefore human resources. The money could be used by the determining authority to fund additional or temporary staff, and appoint professionally qualified consultants where the skills or expert knowledge may not exist with the authority i.e. engineering, minerals or geology experts. This would help to speed up the determination of applications through increased resourcing which would in turn enable greater collaboration between industry and decision makers, promote better project understanding thus reducing the scope of or the need to request additional information, and would ensure suitably qualified professionals assess the evidence provided. Planning Performance Agreements (PPA) which planning authorities and applicants use to agree timescales, actions and resources for an application and often require an administrative charge, have limited effect in delivery expedient decisions because the authority is not bound to the agreed timescales meaning there is no accountability or repercussions when an application exceeds the agreed determination period. Such a mechanism would therefore be beneficial.

Q. How can greater cross-sectoral decision making be encouraged?

Greater cross sectoral decision making has been helped by the formation of NIPU as a single decision making body for large infrastructure projects. In terms of spatial planning and infrastructure, early engagement, effective and proactive consultation and a clear strategy indicating the responsibility of each sector in the decision making process is key to ensuring greater, more efficient and informed cross-sectoral decision making. It is also important to have a clear project strategy which identifies shared goals, timescales, responsibilities, milestones and potential barriers to making a decision and ensuring that this is agreed and maintained through strong leadership and management.

Q. What opportunities and challenges are presented by devolution of infrastructure decision making?

Whilst some local communities criticise the devolution of infrastructure decision making as undemocratic, as discussed in our response to Question 4. above, the new NSIP process has helped to speed up planning for national infrastructure projects when compared to the previous system led by the Town and Country Planning Act 1990, using the T5 Inquiry as an example. Similarly, whilst the Government has tried to return some decision making powers to local communities through the Localism Act 2011 which introduced Neighbourhood Plans (NP) and Neighbourhood Development Orders (NDO) to the planning system, some types of infrastructure are excluded from the NDO process including minerals and waste development, any Environmental Impact Assessment (EIA)

development and NSIP's. This is written in law and therefore shows the Government's commitment to devolving infrastructure decision making from local communities and developing a more comprehensive infrastructure strategy at a County and national level. Contrary to some complaints, this is not an undemocratic process and local communities are not excluded from involvement in these processes, are consulted and are represented or can speak at Committees and Inquiries, and submitted documents also remain in the public domain. The National Infrastructure Plan should be evidence based as with a Local Plan, present a strategic proposals map to inform local communities about infrastructure needs and locations, and should be adopted for at least a 15 year period to maintain investor confidence throughout projects which take years to get through planning and construction, and to avoid post-election strategy changes. There is some hope that the emerging independent NIC will support and encourage such a strategy.

Q. What new and emerging technologies and disruptive trends should we consider in producing this assessment?

Digital technology will continue to take an increasing role in our daily professional and personal lives, and ensuring capacity and connectivity will be paramount to meeting the infrastructure needs of the UK. However notwithstanding the use of telecommunications and digital media as a service, digital technology will continue to increase as a means of managing and operating other essential infrastructure such as transport including emergency services, energy, financial services and UK defences, meaning that political risk, security (terrorism, cyber and organised crime) and reliability of connection will also be critical when assessing infrastructure needs.

There are a number of new and emerging energy technologies which should be considered when assessing infrastructure needs. It is important to assess how and if they will integrate with existing national distribution and transmission systems, the policy, funding and spatial planning requirements for new and emerging energy infrastructure such as shale gas, carbon capture and storage, nuclear energy and other low carbon energy sources, and the adaptability of existing and older historic buildings to accommodate new energy infrastructure (considering that in England there are over 500,000 listed buildings and 21% of homes were built before 1919). Capacity is also an important consideration as there are already areas in the national transmission system which are at capacity meaning that they cannot accept any new energy generation supplies. What needs to be carried out first and foremost is an assessment of existing capacities and investment to increase capacity based on existing, new and emerging energy technologies to present an evidence based, national and strategic plan that removes political risk otherwise the UK will not be able to meet ancillary infrastructure needs.

Disruptive trends relate in particular to the effects of an aging population, changing family structures, life expectancy and migration, and the effects these will have on infrastructure including healthcare facilities, housing a varied population in single person, small and larger family homes as well as the elderly who may need assisted living accommodation, retirement or specialist care homes. For example, Government figures show that by 2050 there are projected to be 19m people over the age of 65 in the UK and the pensioner population will also rise despite increases to the state pension age with there projected to be 2.8 working age people per every person of pensionable age by 2033 compared to 3.2 people in 2008. This will also have an impact on the availability of public spending for infrastructure projects which combined with urbanisation and population growth will have a subsequent impact on national infrastructure including the need for additional transport, education,

healthcare, water and housing as well as the energy and communications needed to integrate and power these new developments.

Q. How can we improve public engagement in infrastructure decision-making?

Public engagement should be undertaken early on in the project process prior to the finalisation of the design and should not just be considered a 'box ticking' exercise. Public engagement should take a variety of forms including exhibitions, leaflets, posters and digital media i.e. websites and targeted social media. It is important to be open, honest and transparent with the community about what the proposed development will involve during construction and operation, if there are any community benefits and why the development is needed. Suitably experienced PR and planning consultants can work with a planning authority and/or Parish Council to develop an effective engagement strategy to maximise the benefits of, and thus improve public engagement.

Early public engagement can improve the quality and efficiency of infrastructure decision making and should be factored into project schedules. Firstly, engagement with local residents can help to prevent miscommunication about a project by allowing the Operator to explain the development proposals first hand rather responding reactively to rumours about a proposed development by which time people may have already made up their mind about the proposal. It is also important to engage with Local Members as they act as a means of communication and representation within the local area. Secondly, residents have local knowledge about the area, landowners and issues in the community (i.e. that road always floods in the spring, our local community centre needs a new roof etc.) which is valuable in designing the project and developing any community funding programmes. Thirdly whilst some concerns cannot be alleviated, public engagement can bring around genuine ideas that can influence the proposed development and make it more acceptable to the local community through community benefits i.e. a community fund, or simple environmental improvements like mending potholes or improving Public Rights of Way.