Response

To

Call for consultation

On the Statement of Strategy

For


Damien Owens CEng FIEI,

Registrar

Engineers Ireland

5th August 2016
Introduction

Engineers Ireland is the voice of the engineering profession in Ireland and has over 23,000 members. We have been representing the engineering profession since 1835, making us one of the oldest and largest professional bodies in Ireland.

Our members come from every discipline of engineering, and range from engineering students to fellows of the profession. Engineers Ireland awards professional titles to our members according to their qualification, including Chartered Engineer, Associate Engineer and Engineering Technician. Engineers Ireland is the registered Competent Authority in Ireland for the engineering profession under EU Directive 2005/36.

Engineers Ireland recently launched its sixth annual State of Ireland report which put forward a range of actions in the key areas of energy, communications, transport, waste and water. This response presents the key findings from the State of Ireland report in relation to transportation infrastructure and is further supplemented by the collective opinions of experts from our Road and Transportation Society which comprises our members working in all sectors of transport on the island of Ireland.

In the State of Ireland 2016 report, Engineers Ireland urges the Government to adopt a leadership role on climate action because the country’s energy future depended on taking bold steps now to progressively transition to a carbon-free society. Engineers Ireland believes the national bus fleet and all vehicles operated by State agencies, including Government ministers’ cars, should be converted to electric, compressed natural gas [CNG] and hybrid fuel sources.

Engineers Ireland supports the Government’s continued commitment to investing in strategic national infrastructure. In every part of the country, this investment will boost competitiveness, create jobs and improve equality of opportunity.

Engineers Ireland welcomes this opportunity to provide feedback to the Department of Transport, Tourism and Sport on this important consultation and we are available to discuss aspects of this submission in detail with the Department.
Recommendations on transport from Engineers Ireland ‘State of Ireland 2016’ report.

12 Months

- Progress funding mechanisms for delayed national road projects countrywide;
- Improve road management systems in conjunction with increased road maintenance funds;
- Progress development of second runway at Dublin Airport;
- Develop solution for north Dublin and Dublin Airport rail/light rail connection;
- Continue to invest in improved facilities for pedestrians and cyclists, in particular in the major cities.

Five-year

- Accelerate the prioritisation of investment in infrastructure projects to increase Ireland’s competitiveness and address the unemployment challenge;
- Progress the planning process for port redevelopments in Cork and Galway;
- Agree standards for data formats and communication protocols for integrated traffic systems to enable information sharing;
- Continue to work towards the development of an integrated, frequent and reliable, network of public transport services in our cities, including integrating fare structures across bus and rail modes.

Source: State of Ireland Report 2016
General comment

Engineers Ireland considers that the ‘Programme for a Partnership Government’ document broadly reflects the current needs of the Irish economy in the coming years. Each sector of the economy will have different requirements and it is ambitious to develop a plan that would address every possible scenario. One of the challenges of implementing the proposals in the Partnership document will be to determine the correct balance of short and longer term capital investment to sustain economic growth without causing inflationary pressure on the supply side which may jeopardise longer term competitiveness and growth.

Engineers Ireland welcomes the announcement by Government to introduce the Local Infrastructure Fund which should encourage the development of housing by reducing the costs associated with construction, such as access routes into housing estates, added amenities and other infrastructure which are important to deliver sustainable, progressive communities.

Engineers Ireland recognises that investing sensibly in infrastructure always gives a positive return on expenditure for the exchequer. However, at 2 per cent of GDP, it is our opinion that current and planned infrastructural spending is far too low and must be in the order of 4 per cent to meet the infrastructural needs of a progressive vibrant economy.

Engineers Ireland advocates for the establishment of a single infrastructure unit to sustainably plan and prioritise investment in key areas - not just in housing - but across transport, education, health, energy, water and the digital economy. As things stand, planning and delivery in these areas are spread across Government departments, each competing for finite funding, with multiple layers of decision-making and little central oversight. We believe that an independent assessment of our long-term infrastructure needs is required, and then a single planning and delivery unit charged with prioritising and driving critical initiatives is required. There are many examples internationally of how such an entity could be structured to best support the determination and implementation of policy on infrastructure – decoupled from the electoral cycle. This entity would also be responsible for co-ordinating a long-term, cross-sectoral approach to building political and public consensus and understanding on national infrastructure performance, under a range of possible future scenarios.
Engineers Ireland recognises that the Department of Transport, Tourism and Sport (DTTAS) has established a vital link between transport infrastructure and economic prosperity as part of the SFILT Study (Strategic Framework for Investment in Land Transport). This should be highlighted as a means of ring-fencing economic stability for future years. This study provided:

- Evidence on benefits and outcomes of transport investment in Ireland;
- The impact of transport investment on Ireland’s global competitiveness; and
- The impact of transport investment on regional development.

The outputs of the study could be used to support an increased focus on transport.

**Road Investment**

The SFILT Study (Strategic Framework for Investment in Land Transport) highlights that the minimum steady state investment required for our transport network has not been met during the recession, leaving large deficits particularly in the area of roads maintenance. Engineers Ireland proposes that investment in the road network should now be increased to meet our minimum steady state infrastructure requirements.

Investment in roads maintenance nationally will also increase employment for small contractors and suppliers on a national basis, who in turn pay tax, spend locally in other businesses, revitalising rural economies, etc. This maintains and reinforces the existing road network without incurring large investment costs for one particular area.

It should be noted that the construction sector can play a significant component in the delivery of the Government objective of creating 200,000 jobs by 2020 in the commitment by Government to making adequate continuous investment in infrastructure proportionate to what most modern developed economies are spending as a percentage of GDP. Supporting the construction sector through continuous steady state investment provides for a much more sustainable construction sector and provides for retention of skilled/trade labour resources capacity to implement projects as they are rolled out. Historically the stop start nature of Irish construction investment has led to a lack of available skills, which has in turn restricted the capacity of the construction sector to meet the demands placed on it which in turn has led to construction inflation. Government bodies can mandate the use of latest technologies such as BIM (Building Information Modelling) on public projects which will reduce the cost to build and operate public projects and increase value for money for the taxpayer.
The provision for encouragement of Transport Infrastructure Ireland (TII) to commence planning on other road projects is totally inadequate. With respect to road investment the TII project pipeline needs to be included in the discussions as regards the mid-term review of the ‘Building on Recovery’ programme. TII have many road schemes that are stalled until such time as funding is made available to progress them or have been progressed albeit at a slower pace, schemes that accord with the development of the new Atlantic Economic corridor and encourage more balanced national development:

- N4 Collooney Castlebaldwin
- N5 Westport to Turlough
- M7 Naas Newbridge upgrades
- N8/N25/N40 Dunkettle Junction
- N22 Ballyvourney to Macroom
- N56 Dungloe to Glenties
- N56 Mountcharles to Inver
- N59 Moycullen Bypass

The current profile of capital expenditure needs to be re-apportioned to reflect improving economic conditions and to allow the delivery of much needed schemes and in turn to meet other employment objectives and underpinning the viability of our construction industry.

Engineers Ireland suggests that introduction of reduced 30km/h speed limits in housing estates be referenced and supported as a means of improving quality of life for our communities and our children. Funding needs to be provided to Local Authorities (including Dublin Authorities) to assist with the roll-out of Slow Zones. A small investment in funding here will go a long way to improve road safety within housing estates.

There is a need to invest heavily in cycle infrastructure in our cities. Cycle facilities can be provided at a fraction of the cost of road or public transport investment and can yield significant benefits in terms of modal shift, thereby reducing pressure on other transport modes. This should be complemented by measures to encourage cycling among school children, to engender sustainable travel patterns in future generations.
Rural Transport

Engineers Ireland recommends undertaking a study to look into the feasibility of schools opening earlier, and at staggered times, to relieve some of the traffic congestion on the road network at peak times. This may also help to reduce the cost of the School Transport Scheme.

A coordinated approach to rural transport and development is required to allow for appropriate development of infrastructure to cater for communities across local authority and geographic boundaries.

Wild Atlantic Way & Greenways – the provision of cycling infrastructure is a vital component of the success of initiatives such as the Wild Atlantic Way and Ireland’s Ancient East. The provision of the necessary support legislation to provide for example the compulsory acquisition of lands where necessary to provide such cycling infrastructure and the assignment of the ‘vires’ to the appropriate delivery agency/entity, needs to go hand in hand with the allocation of appropriate funding to allow Ireland take full advantage of its international perception as being an attractive tourist destination.

Public Transport

The medium term review of the development plans might be viewed in the context of examining means of advancing public transport initiatives such as the bus rapid transit corridors, the railway interconnector between Connolly and Heuston stations in Dublin, the next generation of LUAS lines featured in the NTA Greater Dublin Area Strategy such LUAS to Poolbeg thus aligning with the proposed Strategic Development Zone. Acceleration of the proposed optimised Metro North is also something that should be viewed, a more ambitious but achievable target than 2026 for the availability of this much needed commuter service should be considered.

The importance of transportation and accessibility to hospital and medical facilities needs to be feature prominently and needs to be addressed in the context of new developments as well as retrospectively. The new national children’s hospital is an example of where Government policy should aim to establish it as being the most accessible facility in the country, and to provide for all spectrums of transportation in its development.
Brexit

Though the full impact of Brexit has yet to materialise, it is clear that Ireland is uniquely placed to gain from the relocation of English language based service companies from the UK. However various media outlets have highlighted Dublin’s transport infrastructure deficit as the single biggest obstacle to attracting Brexit-affected companies to Ireland rather than Amsterdam or Frankfurt. There will be a major loss of potential employment to the economy if this deficit is not addressed in the immediate short term. Ireland has a short window of opportunity over the coming months, particularly at the forthcoming budget, to signal its intent to invest in the necessary infrastructure to attract and support the move of global service companies relocating from the UK.

Long Term approach

Government investment in infrastructure should occur before the anticipated bottlenecks occur e.g. provide additional lanes to motorways which we already know will be congested in the short to medium term. This is particularly the case for the M50 orbital and radial motorways which large volumes of commuters rely on in the absence of credible public transport alternatives.

There is significant development proposed for new housing, particularly in the greater Dublin region and the current transportation system does not have the capacity to cater for the increased traffic. Providing for transport infrastructure in advance of large scale housing and industrial development improves economic efficiency and reduces the proliferation of ad hoc measures until infrastructure provision finally catches up. While flagship infrastructure projects such as Metro North have been signalled more emphasis is required on short to medium term measures to cater for the projected growth in commuter traffic.

New infrastructure projects, in particular for transport facilities, should incorporate the highest standards of universal access design to improve the lives of those with disabilities. Coupled with the cost effectiveness of modern CCTV systems we can develop public transport infrastructure that is inclusive and safe for all citizens.

Engineers Ireland believes that an independent assessment of our long-term infrastructure needs is required, and then a single planning and delivery unit charged with prioritising and driving critical initiatives is required.
Engineering Resources

Engineers Ireland has publicly expressed concern at the low levels of students reading engineering programmes in disciplines of civil, structural and construction related engineering. While CAO applications for construction related courses is starting to rise there will be a skills shortage for the next 3-4 years until larger volumes of graduates enter the workplace.

The supply of supporting trades skills and apprenticeships and traineeships is vital to support the construction programme envisaged by Government. By adopting a more proactive stance as regards Corporate Social Responsibility in the procurement of public sector contracts consideration could be given to devising means of mandating the involvement of the current apprenticeships in the implementation stage of projects thus assuring that experience is available to home grown talent and to facilitate the retention of skilled trade and labour in the national construction sector.

All-Island Economy

Engineers Ireland, the Irish Academy of Engineering and Intertrade Ireland produced a report in 2010 titled ‘Infrastructure for an island population of 8 million’. The key recommendations of the report were

1. Improve transport connections, including a high speed, high frequency intercity rail system, between the cities of Dublin and Belfast.
2. Develop a second transport corridor along the South Western Corridor between Cork, Limerick and Galway.
3. Improve the motorway network to meet the projected increased traffic flows between the eight principal cities and links to ports and airports.
4. Determine the complementary role of road and rail when planning to improve traffic flows between the main centres.
5. Make capacity available in Dublin Port by relocating the Oil Zone to a new dedicated port with pipelines to supply aviation fuel directly to Dublin Airport
6. Develop Dublin Airport, complemented by Belfast International, as a major international hub to improve worldwide connectivity for business on the island.

While many of these recommendations are under consideration or active development we must not lose momentum or we risk developing a two-tier economy. Notwithstanding the impact of
Brexit, greater emphasis is required to ensure that the capacity of the intercity road and rail networks between the main population centres of Dublin and Belfast are increased ahead of the projected point of congestion. Similarly, as the population of the main urban centres increases greater investment will be required in urban transport systems to support the rapid transport of large volumes of commuters and reduce the negative effects caused by long commuter times.

The upgrading of the motorway network to across the country will foster a greater balance in economic activity across the island (e.g. motorway to Derry/Donegal region). Similarly, upgrading of the motorway network from Dublin to Cork and Limerick could provide greater access to these regions for multinational corporations as well as greater traffic for Cork harbour and Shannon airport which could position itself as an air cargo hub.

Many of the findings of the Engineers Ireland/IAE report have been echoed more recently by a report from IBEC - ‘Connected: A prosperous island of 10 million people’. This report cites international comparators whereby investment in transport infrastructure in Ireland has fallen steadily since 2009 to 0.8% of GDP in 2013 - back at 1995 levels. In contrast the central European economies with which we compete doubled their investment over the same period to 2% of GDP. It is the view of Engineers Ireland that we are now playing a ‘catch-up’ game in terms of transport infrastructure and greater investment is needed for Ireland to build and retain competitiveness.

Sources:

‘Infrastructure for an island population of 8 million’ – Engineers Ireland, Irish Academy of Engineering.


‘Connected: A prosperous island of 10 million people’ - IBEC


End of submission.