

**An Roinn Caiteachais Phoiblí**  
**Sheachadadh PFN agus Athchóirithe**  
Department of Public Expenditure  
NDP Delivery and Reform



**Invitation from PER Accelerating Infrastructure Taskforce to the Irish Academy of Engineering (IAE)**

**To meet with the Accelerating Infrastructure Unit and partake in a structured discussion on accelerating infrastructure.**

**3<sup>rd</sup> June 2025 in the Department's Offices in Merrion Street**

The 6 questions will guide the discussion,

## **Accelerating Infrastructure: Stakeholder Interview Questions**

1. What are your views on how core economic infrastructure is delivered in Ireland?
2. What are the barriers to the delivery of transport, energy and water networks in Ireland?
3. How do these barriers affect the delivery of these core economic infrastructure networks?
4. How have these barriers affected you in a personal and/or professional capacity?
5. What are your top three high-level solutions to remove these barriers?
6. Have you any additional feedback that could support the delivery of critical infrastructure in Ireland.



**Response from Irish Academy of Engineering (IAE) to DPER invitation to a structured discussion on accelerating infrastructure 3<sup>rd</sup> June 2025 in the Department's Offices in Merrion Street.**

## **Executive summary**

The Academy has published many reports on the overall delivery of major projects and critical infrastructure. All these are available on our website [www.iae.ie](http://www.iae.ie) .

The most relevant recent Academy reports are:

- **April 2025 - [The energy transition-what is the 2050 action plan and timeline?](#)**
- **March 2025 - [Infrastructure 2025 - 2040](#)**
- **November 2024 - [Strategic Infrastructure - Major Project Delivery](#)**

We have structured our Academy response based on the 6 questions posed by DPER and the Academy is available for any follow up questions.



The Academy delegation is comprised of:

**Sean Finlay** – President 2025-2026

**Tom Leahy** – Special Advisor, Director & Past President

**Eamonn O'Reilly** –Energy & Climate Action committee(Chair)

**Tim Corcoran** –Infrastructure committee(Chair) & Hon. Treasurer

Biographical details were supplied in advance of the meeting

***We welcome the Government focus on Infrastructure delivery i.e. the formation of a Cabinet Committee; a dedicated Infrastructure Delivery Task Force; a review of International Practice; this engagement examining Barriers to Delivery and the review of the NDP. We also welcome the creation of a Joint Oireachtas Committee on Infrastructure, a Major Projects Advisory Group and a Construction Sector Group.***

***The Irish Academy of Engineering supports these initiatives and will continue to contribute to this important topic.***

Question	Response
<p>1. What are your views on how core economic infrastructure is delivered in Ireland?</p>	<p><b>The delivery of core infrastructure in Ireland is often characterised by very slow delivery, too many steps punctuated by slow approvals from Central Government and a lack of targeted prioritisation by Government, a very cumbersome Planning process with no explicit legislation of eminent domain, where the common good is trumped by individual objections and lengthy Judicial Reviews.</b></p> <p><b>Infrastructure delivery has many different aspects including Engineering, Political, Legal.</b></p> <ol style="list-style-type: none"> <li>1. Ireland has created the correct structures to deliver key infrastructure notably, by the establishment of commercial State companies including ESB / EirGrid, TII and Uisce Éireann.</li> <li>2. ESB had a long history of meeting the country's electricity infrastructure requirements prior to liberalisation of the electricity market and TII (and NRA before it) successfully delivered the national motorway network based on the National Roads Needs Study of 1998. The creation of Uisce Éireann in 2013 followed decades of underinvestment in water assets and has delivered significant improvements.</li> <li>3. However, over recent decades the freedom of such organisations to deliver the infrastructure they are responsible for has been hindered by excessive involvement of parallel structures in Government Departments.</li> <li>4. Government needs to set policy and then pass the challenge of delivery over to the experts in State companies and Local Authorities to deliver essential national infrastructure.</li> </ol>

Question	Response
<p>2. What are the barriers to the delivery of transport, energy and water networks in Ireland?</p>	<ol style="list-style-type: none"> <li>1. <b>Need to Streamline and Consolidate Environmental legislation by the Law Reform Commission</b></li> <li>2. <b>Infrastructure delivery plans for water and energy and transport should be prepared “across” Government Departments rather than “within” individual departments</b></li> <li>3. <b>The new Planning Act 2024 Commencement Orders should issue immediately</b></li> <li>4. <b>Lack of certainty of multi-annual financing / regulatory approval to get on and deliver the agreed programme of projects.</b></li> <li>5. <b>A significant barrier to the delivery of energy policy is the lack of a national electricity infrastructure masterplan and the lack of a single point of accountability / responsibility to deliver the essential elements of this masterplan.</b> The pinch points already evident with the current approach are the delivery of new overhead transmission lines and the timely delivery of back-up generation plant to ensure reliability of the electricity supply when renewables are not sufficient.</li> <li>6. <b>Explicit Government support for the delivery of critical national infrastructure projects including the removal of policy target conflicts.</b></li> </ol>
<p>3. How do these barriers affect the delivery of these core economic infrastructure networks?</p>	<p><b>Multiple long term strategic plans are being put in place by various agencies, government departments and delivery bodies with varying degrees of integration or overview.</b></p> <ol style="list-style-type: none"> <li>1. <b>Excessive number of stages punctuated by long periods where approvals are not forthcoming in a timely manner.</b> The system for major capital projects was built up in the 1950’s and progressively tuned in the recessions of the 1980’s – It was designed to give an illusion of progress on schemes when in reality there was limited money to actually build infrastructure. The creation of commercial State companies including ESB / EirGrid, TII and Uisce Éireann should remove the need for these parallel approval stages.</li> <li>2. <b>Widespread delays due to extensive use of Judicial review (JR)</b></li> <li>3. <b>Lack of a clear and understood prioritisation of project delivery.</b></li> <li>4. This creates uncertainty for those dependent on this infrastructure including developers of housing (private, State and voluntary) and industry (notably tech industries including data centres)</li> </ol>

<b>Question</b>	<b>Response</b>
4. How have these barriers affected you in a personal and/or professional capacity?	<p>The fact that we are here today shows that our infrastructure needs substantial investment to support delivery of the Housing and other National priorities.</p> <p>While there is much more to do there are many excellent examples of project delivery. The recent opening of the Arklow Waste Water Treatment Plant (WWTP) was commenced in 1993 but with the creation of Uisce Éireann was successfully delivered on time and within budget. This is but one example showing the capacity to deliver by commercial State companies including ESB / EirGrid, TII and Uisce Éireann as soon as funding is allocated.</p>

Question	Response
<p>5. What are your top three high-level solutions to remove these barriers?</p>	<ol style="list-style-type: none"> <li data-bbox="622 260 2018 550">1. <b>Provide multi-annual funding for water and energy for housing and additional ring-fenced funding for water.</b> To Increase capacity to c. 50,000 housing units/year will require an additional ring-fenced investment of the order of €2 Bn. This includes €1.7 Bn. for high density housing in Cities and large towns to maximise the number of housing units coupled with €300 m. to support small schemes in rural towns and villages. Multi Annual funding for key programmes such as housing should be ring fenced to those areas with high density housing with specific ring- fenced funds for smaller rural development and must be additional to existing programme funding.</li> <li data-bbox="622 598 1960 662">2. <b>Prepare a new Housing Infrastructure Statutory Instrument (SI) for water and energy connections</b></li> <li data-bbox="622 750 2029 1141">3. <b>Prepare and deliver a national electricity infrastructure masterplan</b> -Government should bypass the administrative bureaucracy it has created in the energy and electricity sectors and directly ask EirGrid and ESB to prepare and deliver the national electricity infrastructure masterplan. Importantly, this would not preclude private sector investment as individual projects could be delivered by way of concession contracts. <ul style="list-style-type: none"> <li data-bbox="772 933 1590 965">• Government to set clear and realistic policy objectives.</li> <li data-bbox="772 981 2004 1053">• State infrastructure companies to translate these policy objectives into masterplans, programmes and projects.</li> <li data-bbox="772 1069 2029 1141">• Give multi-annual finance / regulatory certainty so that these infrastructure companies can prioritise and sequence the delivery of individual projects.</li> </ul> </li> </ol>

Question	Response
<p>6. Have you any additional feedback that could support the delivery of critical infrastructure in Ireland.</p>	<ol style="list-style-type: none"> <li>1. <b>Legal powers under the Water Services Act 2007 to address excessive leakage on private property should be vested in Uisce Eireann by new Statutory Instrument(SI).</b></li> <li>2. <b>Upgrading existing water treatment facilities should be designated as exempted development</b></li> <li>3. <b>There should be a much greater understanding of the Societal cost of capacity deficits</b></li> <li>4. <b>Extend the recently announced extension to planning permissions to allow for JR delays</b></li> <li>5. <b>Better engagement by NPWS in the pre application process</b></li> <li>6. <b>In reviewing International Best Practice, examine UK precedents for project “envelopes” and variations</b></li> </ol>

**Supporting speaker notes on the recommendations:**

**Q1 - Eminent Domain**

Through Europe there is wide acceptance that central authority trumping the individual for the common good is acceptable. Eminent domain is the power of the government to take private property and put it to public use, following the payment of just compensation and to deliver infrastructure for the common good. In Ireland we operate a system where individual entitlement trumps the common good. When a planning application is approved anyone has the ability to appeal against that decision. This differs from most other Countries, where third party appeals are rare. Not only does Ireland allow Judicial Reviews but even allows those who lose cases to have their costs covered.

Ireland is now in a unique position where Government and the people agree that housing is essential and support the delivery of housing and the supporting infrastructure. However, there is no specific legislation to enshrine the common good and nothing that can be taken into account in any Judicial Review.

## Q2 -

- **Streamline Environmental Legislation.** The system of Environmental consents is incredibly complex and it would greatly assist the Courts if this legislation could be streamlined by referral to the Law Reform commission. The Planning process itself is complex and is crucial to the appropriate development of infrastructure in accordance with statutory plans and planning legislation. Clients entering the planning process must be able to have a clear view of what the success criteria are, what the likely considerations will be, what studies and engagement are needed to meet the planning authority requirements. In Ireland, there is a high level of uncertainty associated with the Planning process that can and does lead to major delays and costs.
- **The new Planning Act 2024 Commencement Orders should issue immediately.** Seven months ago, on 17 October 2024 the President of Ireland signed the new [Planning and Development Act 2024 \(PDA2024\)](#) into law. The PDA2024 updates a quarter of a century of planning legislation to meet Ireland's ambitions and challenges into the coming decades. The new legislation was expected to be commenced on a phased basis.

## Q3 Lack of a clear and understood prioritisation of project delivery- Key water examples.

- The **Water Supply Project Eastern and Midlands Region** – This is a critical national infrastructure project, it will have capacity to support water supply needs for up to 50% of our population. It will bring treated water from the Parteen Basin to Peamount in Dublin with the capacity for offtakes along the route in Tipperary, Offaly and Westmeath. It will also enable supplies serving Dublin to be redirected back locally in Carlow, Wicklow, Meath and Louth. I started the project in 2003 in Dublin City Council when I was in charge of Strategic Planning and Capital Projects with the support of the then Department of Environment (Now Housing) by delivering the Strategic Environments Assessment (SEA) – the project had the potential to create 250,000 new jobs using this water. **In 2025, 22 years have elapsed and the project is still at the Pre – Planning stage!**
- **Greater Dublin Drainage (GDD) Project.** The Greater Dublin Drainage Project (GDD) is an **essential national infrastructure project to develop a new regional wastewater treatment facility** and associated infrastructure to serve north Dublin and parts of the surrounding counties of Kildare and Meath. The Greater Dublin Strategic Drainage Study (“GSDSDS”)<sup>1</sup>, was a major region wide strategic plan, completed in 2005, for medium and long-

term urban drainage needs. **Twenty years have elapsed since 2005 and we are no closer to building this key infrastructure.**

- **While the current Housing crisis is causing major challenges for our economy this will pale into insignificance in the 2030-2040 decade in the Greater Dublin Region, where the absence of sewage treatment facilities identified in the 2005 Greater Dublin Strategic Drainage Study (“GSDSDS”) will result in an embargo on all new housing and industrial/commercial development requiring waste water treatment.**
- Comparing the NDP top 50 largest water sector schemes published in **September 2023** with the NDP Top 50 largest schemes published a year later in **November 2024** it is surprising to note that:
  - **Flooding** – Of the 4 schemes identified in 2023 top 50 list only 1 was retained in the 2024 Top 50 and the number of Flooding schemes in the top 50 projects reduced to 3
  - **Uisce Éireann** – Of the 7 large schemes identified in the 2023 top 50 list only 2 were retained in the 2024 Top 50 list and the number of Uisce Éireann schemes in the top 50 reduced to 6.
  - **This variation in the top 50 schemes from one year to another causes confusing messaging** – one would expect the top 50 schemes to be those with highest priority and not change substantially from year to year.
- Of 29 Road Projects proposed by TII, only three are at or proceeding to construction, while the remainder are at various stages of planning.
- **Widespread delays due to extensive use of Judicial review (JR)**- The new Planning Act 2024 Commencement Orders should issue immediately coupled with streamlined environmental legislation.
- **Prepare a new Housing Infrastructure Statutory Instrument (SI) for water and energy infrastructure.** We believe that Infrastructure required to be delivered to enable the water and energy connections essential to housing delivery should be identified in a new Statutory Instrument. The new Statutory Instrument (SI), can be used to clearly identify

Government support for these projects. Individual Government Departments should then be required to prioritise delivery of relevant stages of the projects without putting these at the bottom of very long lists. In any legal process the SI can be used to indicate Government support for specific projects. Most other Countries have equivalent eminent domain provisions actively supporting delivery of projects essential for the common good

#### Q4

The fact that we are here today shows that our infrastructure needs substantial investment to support delivery of the Housing and other National priorities. While there is much more to do there are many excellent examples of project delivery. The recent opening of the Arklow Waste Water Treatment Plant (WWTP) was commenced in 1993 but with the creation of Uisce Éireann was successfully delivered on time and within budget. This is but one example showing the capacity to deliver by commercial State companies including ESB / EirGrid, TII and Uisce Éireann as soon as funding is allocated.

#### Q5

- **Provide multi-annual funding for water and energy for housing.** Adopt multi-annual funding to reassure the infrastructure delivery industry that there is a consistent volume of work available to price and deliver and avoid stop/go phases in priority essential projects. Despite the additional funding being made available for capital investment, sponsoring organisations companies remain under obligation to balance exchequer funding year by year to the approved allocation despite the multi-year capital pipeline commitments. This practise continues to cause inefficiencies in spending, delays and acceleration in a sub optimal way.
- **Prepare a new Housing Infrastructure Statutory Instrument (SI) for water and energy connections.** We believe that Infrastructure required to be delivered to enable the water and energy connections essential to housing delivery should be identified in a new Statutory Instrument. The new Statutory Instrument (SI), can be used to clearly identify Government support for these projects. Individual Government Departments should then be required to prioritise delivery of relevant stages of the projects without putting these at the bottom of very long lists. In any legal process the SI can be used to

indicate Government support for specific projects. Most other Countries have equivalent eminent domain provisions actively supporting delivery of projects essential for the common good

## Q6

- **Legal powers under the Water Services Act 2007 to address excessive leakage on private property should be vested in Uisce Eireann by new Statutory Instrument(SI).** Background – In 2002 an Academy member carried out an assessment of private side leakage in a small pilot area of 150 Houses in Dublin. **The results were truly shocking** – One house was using the water equivalent to 200 houses! Several others were using the equivalent of 80-100 houses. The leaks were invariably located outside the houses and under driveways. The water service to the customers was unaffected. The water lost was very substantial. When Uisce Eireann was created 880,000 domestic water meters were installed and where a continuous flow was detected over a 24-hour period a leak was flagged. A first Fix Free scheme, supported by the CRU, was put in place where leaks could be fixed at no charge to the customer. However, many customers do not engage to fix these leaks even though there is no cost to them. The Water Services Act gave extensive powers to Local Authorities (Water Services Authorities) to fix such leaks. It is recommended that these powers of the Water Services Authority in the Water Services Act 2007 be transferred by Statutory Instrument (SI) to Uisce Eireann to address leaks particularly in zones where new housing is proposed to provide much needed capacity for new housing.  
**This is a very quick fix to generate more water capacity in locations where housing is planned**
- **Upgrading existing water treatment facilities should be designated as exempted development** - Where an existing asset is used for Drinking Water treatment works (WTW)/ Waste Water Treatment works(WWTW) and this has to be further developed on the existing footprint to meet EU Directives (Water Directive or Urban Waste Water Treatment Directive) and is essential for delivery of new housing this should be permitted as an exempted development under the Planning Acts subject to use of agreed standard solutions. This type of approach was delivered by Uisce Eireann when delivering the National programme of drinking water disinfection.

- **There should be a much greater understanding of the Societal cost of capacity deficits**

While delays in planning and delivery lead to increased project costs, the greater impact is the societal cost of capacity deficits, the opportunity costs when anticipated benefits are delayed coming onstream. This is reflected in economic loss with uncertainty around provision of critical services (energy, water, transport) impacting housing provision, investment in jobs and services. Delays to achievement of binding climate and other regulatory targets can also lead to punitive fines. Therefore, Ireland needs to take a more nimble strategic and long-term view of infrastructure capacity needs. This would recognise the realistic timeframes for complex infrastructure and ensure that plans are agreed enabling individual investments to be advanced as needed in line with funding availability. **What is not appreciated is the cost of such delays – with annual construction inflation at 7% a delay of 9 years actually doubles the project cost and prevents the extra cost being used to deliver additional infrastructure.**

*The Irish Academy of Engineering supports these initiatives and will continue to contribute to this important topic and is available to provide additional information as required.*

## Appendix 1

Introducing the Irish Academy of Engineering

List of recent Academy Reports- all available on our website [www.iae.ie](http://www.iae.ie)



- Engineering Academies throughout the world are a key feature of all developed economies providing independent and evidence based expert advice to governments and policy makers.
- The Irish Academy of Engineering has been accepted into the European Council of Applied Sciences Technologies and Engineering (known as **Euro-CASE**) and, more recently, the Worldwide International Council of Academies of Engineering and Technological Sciences (**CAETS**).
- Such acceptance is only made following a peer review and provides important independent validation for the Irish Academy and of the standards applied in its work.
- Membership of both International organisations provides our Academy with unique access to these international networks and the opportunity to directly shape the future of society, where engineering and science play an important role.
- We are the only Academy focussed on Engineering.
- We are an all-Island Academy
- All our reports are available on our website [www.iae.ie](http://www.iae.ie)