



Future Infrastructure Investment and Delivery in Northern Ireland

Policy Consultation Paper

The Consultation Process

This paper will involve a substantial amount of research and consultation, ultimately producing an in-depth and lengthy document. A two-stage consultation process is therefore envisaged;

- Full consultation paper – This will propose policy ideas and options to address the identified issues and those highlighted in the pre-consultation process. Throughout this process, it is also envisaged that there will be direct engagement with some of those who are currently working in this field, and visits to some best practice examples.
- In parallel with the consultation paper, there will be considerable internal consultation with elected representatives on relevant committees and those with a specialism in some of the areas outlined.
- Final policy document – Following the consultation process a final policy paper will be adopted that will inform future DUP manifestos.

As part of the preparation of the full consultation paper an internal engagement group has been identified. This paper will be circulated to them for comment and input before final publication. This will be undertaken via electronic communication due to restrictions in place relating to COVID-19.

Nothing contained within the consultation papers constitute DUP party policy.

Introduction

The issues of infrastructure investment and delivery encompass a wide range of cross-cutting policy areas, each one critical to our economic and social development. There are a multitude of papers, across government, academia and the private sector, locally, nationally and internationally, offering a range of options on how modern infrastructure projects should be developed and financed. Many of these have been examined in the compilation of this paper as part of the desktop research process.

In Northern Ireland we have a mixed record in this field in recent times. The lengthy delays in key projects such as the A5 widening, the York Street Interchange and North-South Interconnector, point to repetitive problems - a slow bureaucratic system with cumbersome procurement processes. In contrast there are examples of localised infrastructure projects transforming communities and services, such as the Connswater Greenway in East Belfast, the Titanic Tourism Centre and the Enniskillen Hospital. We need to develop a higher level of consistent and competent delivery.

Economic infrastructure such as energy, transport, utilities and digital communication underpin successful modern economies. These projects also make a difference in terms of long-term job creation and can increase rates of productivity. As we work towards building a new, stronger Northern Ireland investing in our infrastructure will be a key economic driver. However, a plan must be developed which is transformational and does not become bogged down in political disagreement and negative, delaying tactics.

It is a legacy of the Troubles in Northern Ireland that infrastructure investment was a neglected area of public policy. Historically, government spending on infrastructure has been lower than other parts of the United Kingdom, largely due to additional public spending on security. It is impossible to quantify this shortfall definitively but as an indicator, below is a comparator between security spending in the mid-late 90's against other key areas of public expenditure;

	1994- 1995	1995- 1996	1996- 1997	1997- 1998	1998- 1999*	1999- 2000
Sector (£m)						
Law, Order & Protection Services	959	934	901	929	912	923
Industry, Energy, Trade & Employment	432	430	474	488	459	444
Transport	177	174	172	165	161	161
Housing	226	246	248	243	243	240

This has somewhat been addressed in recent years and some argue, for example, that Northern Ireland has a considerably better broadband infrastructure than other parts of the UK. There is no doubt, however, that significant improvements must be found, in how we deliver projects and raise the finance to fund them.

Successive political agreements have often included an element of infrastructure funding which has benefitted Northern Ireland, most recently the Confidence and Supply Agreement between the DUP and Conservative Party. It is unclear what impact COVID will have on public spending in the next few years but whether it is cuts or increases Northern Ireland still needs to address its infrastructure deficit, and the challenge will be raising additional funding locally to meet the challenges of the present and future.

Green Recovery

A critical underpinning our future economic development will be the much mentioned 'Green Recovery'. Whilst laudable we must ensure that this recovery plan is both beneficial to our communities and economy. One without the other will not benefit Northern Ireland in the longer term.

The 'Green Recovery' is the term broadly applied to measures which will be environmentally-friendly contributing towards the economic recovery of the COVID-19 situation. In terms of infrastructure, a number of options are emerging which are ideal contributing towards this plan including;

- The growth of the Greenway network across Northern Ireland
- Improved cycling networks across Northern Ireland
- The development of a Hydrogen Hub
- Local government proposals around home energy retrofitting
- Continued growth of the local renewable energy sector
- Expansion of recycling waste management

There are many other areas where environmentally-aware planning will deliver significant benefits. We are supportive of this concept and wish to see a combination of economic and social benefits. There is an opportunity to be truly transformational in our approach to many aspects of our infrastructure planning. However, each proposal must comprehensively outline both its costs and benefits. We will work with other agencies and sectors to make the 'green recovery' a reality.

Questions

1. What areas of infrastructure do you believe are key to a Green Recovery plan?
2. How can we promote its key principles in longer term infrastructure planning?
3. What economic and social benefits should we prioritise in this recovery plan?

Manifesto Commitments

Previous DUP manifestos have been strong in reference to infrastructure needs for Northern Ireland. The most recent General Election 2019 Manifesto made reference to a number of key infrastructure priorities;

- *Expansion of the public transport bus fleet and shifting it to alternative energies and away from diesel. Buses, often overlooked, are the main form of public transport.*

- *Investment in the strategic road network including in more and better lorry park facilities.*
- *The UK government should make investment in key roads a national infrastructure priority, especially the A75 as Northern Ireland's main connection to the Northern Powerhouse.*
- *The UK needs more international air linkages and following extensive research the conclusion is that third runway at Heathrow represents the best solution for the UK. Such a positive and strategic intervention must also deliver for the regions of the UK.*

The expansion of Heathrow must be on the condition of designated slots for regional interconnection and that this investment has an impact across the UK. Northern Ireland is well placed to host one of the Heathrow construction hubs due to be set up as part of its airport expansion programme. If chosen, this project will act as a catalyst for long term economic growth across the Province and further underpin the local reputation for excellence in the construction and manufacturing sectors.

- *This extra national capacity needs to be complemented by establishing a new Air Routes Task Force.*
- *Digital network infrastructure, which connects us to the Internet, and to each other, is increasingly recognised as core economic infrastructure, like electricity, gas and water. They are central to tackling the UK's productivity problem.*
- *Full fibre networks for the UK.*
- *5G network rollout.*
- *Interconnection is central to a future energy strategy especially to those countries with stronger access to renewables.*
- *The pursuit of a strong interconnection strategy including with Iceland (and examination of Icelandic interconnection making landfall in Northern Ireland).*
- *The National Infrastructure Commission should aspire to be just that, truly national. Therefore, in addition to the members appointed by the national government, the devolved institutions should be able to nominate a suitably experienced appointee.*

The Northern Ireland Executive has considerable responsibility for infrastructure, and this is reflected in successive Assembly election manifestos. In the most recent, 2017, the importance of infrastructure is clearly demonstrated;

- *Northern Ireland needs to keep investing in new and improved road networks to keep our region competitive. Investment should be focused upon improving connections between our key towns and cities and schemes that are of strategic and economic importance. We will support projects such as: the dualling of the Newbuildings to north of Strabane section of the A5; dual carriageways for the Londonderry to Dungiven and the Randalstown to Castledawson sections of the A6; the York Street interchange; the Ballynahinch bypass; the Newry Southern relief road and the Enniskillen Southern bypass.*

- *The Department for Regional Development has steadily improved public transport in Northern Ireland. Passenger numbers are rising, customer satisfaction is good and service reliability and punctuality is high. We have invested in enhancing services including: n new buses, new bus stations and new park and ride schemes across Northern Ireland including new trains including an upgrade to the Enterprise service, track improvements on the Coleraine to Londonderry line and upgrades to Portadown and Antrim railway stations, support for rural and community transport providers, new ferries for the Rathlin and Strangford to Portaferry services.*

We want to see that success continue. The DUP will take forward key public transport schemes such as: the Belfast Rapid Transit Scheme; n the Belfast Transport Hub which will be a high-class gateway for Belfast offering improved access for commuters and also create investment opportunities, extending the network of Park and Ride Schemes at places like Portadown and an integrated Bus and Rail ticketing system similar to the Oyster Card.

- *Northern Ireland has been validly criticised for taking longer than the rest of the UK to deliver major infrastructure projects. An Infrastructure Action Plan has been developed by the Department of Finance and Personnel (DFP) which will see DFP designated as the sole delivery department for all infrastructure projects, with the exception of water, roads and transport because of their specialist nature. Departments would retain responsibility for prioritising projects but the Executive as a whole would benefit from economies of scale plus consistency in how projects are delivered, allowing a significant reduction in the time to construct a scheme with one department solely responsible for all aspects of project delivery. We propose that the Infrastructure Action Plan is implemented with the Department of Finance responsible for the delivery of all non-Department of Infrastructure projects.*
- *Much positive progress has been made with the creation of the Asset Management Unit (AMU) and its work on developing a register of all publicly owned land in Northern Ireland. The AMU has helped the Executive dispose of unwanted land and assets and helped to realise sizeable efficiency savings through the better management and utilisation of assets, but this is the tip of the iceberg in terms of our ability to efficiently manage publicly owned land and assets. The DUP proposes that examination is given to how the role of the AMU could be enhanced including through, for example, the possible transfer of the title to all land to the AMU to help make the management, disposal etc. of land simpler and more efficient. Ultimately, the DUP would like to explore the potential of creating one single entity akin to Public Wealth Funds that operate in places like Sweden and Singapore to effectively and efficiently manage all central government owned land and assets in Northern Ireland.*
- *In 2014, the DUP announced its intention to establish an Investment Fund for Northern Ireland. The Fund would use Financial Transactions Capital as well as drawing in support from the private sector to create a Fund to help finance projects in areas such as social and affordable housing, energy efficiency and*

renewables, telecommunications networks and urban regeneration. Detailed discussions have been ongoing about leveraging in further finance from the European Investment Fund with the aim of creating a £1 billion fund to support the private sector in financing schemes. The DUP will press ahead with realising the ambition of a £1 billion Northern Ireland Investment Fund.

- *The DUP will make the necessary investment in our water infrastructure utilising the increases in capital funding in recent national budgets. If necessary, it will utilise the asset sale flexibilities in the Fresh Start Agreement to fund capital investment.*

Since these papers, there has been a dramatic change in attitudes, largely as a result of the COVID-19 pandemic. New demands to rethink road building, to radically increase the accessibility of cycle infrastructure particularly within urban areas etc are emerging. These will need further consideration in the context of wider economic recovery, and views on these points are welcome as part of this consultation.

The Future of Infrastructure Delivery

The consistent feedback relating to infrastructure delivery is that it can be a lengthy process, with almost an expectation that there will be time and financial overruns. This is unacceptable and the root causes should be examined and addressed. Comments on this point are especially welcome.

A number of sources have suggested the creation of a centralised Infrastructure Delivery Agency, overseeing all delivery aspects of the process. This would remove duplication and the current 'silo' mentality. The reality is that Northern Ireland is a comparatively small region, and when set against others, there is no reason why such a centralised structure would not work and significantly increase efficiencies. It is also proposed that such a structure would oversee projects for both local and central government, however there is a feeling amongst some that the former is often better than the latter in this area. We are interested in hearing views on this and where it should sit within the wider structure of government. There are also views that there should be a greater commercial focus brought into the systems of government. We are open to this and believe there is a wealth of international expertise and best practice that should be drawn upon.

It has become worryingly common to learn of delivery problems for major infrastructure projects in Northern Ireland. In fact, it is challenging to name one which hasn't experienced some form of challenge from its time of inception until delivery.

The Northern Ireland Audit Office (NIAO) refer to this issue in one of their reports;

“In our view, the existing cumbersome governance and delivery structures within the Northern Ireland public sector are not conducive to maximising the achievement of value for money. Several reports on Northern Ireland public procurement have highlighted the potential for improving performance across Northern Ireland Civil Service (NICS) departments by, for example, creating a new centralised procurement and delivery agency to develop and deliver infrastructure and streamline public sector processes. We do not wish to be prescriptive about future structures, but we consider that there is considerable merit in considering how alternative models, resourced with sufficient, highly skilled staff might improve future infrastructure delivery”.

The role of the Strategic Investment Board (SIB) is particularly relevant when considering the comments above. SIB currently works with departments and agencies, with staff specializing in project management and advisory roles, for a wide variety various programmes and projects. Technically this body sits within the Executive Office, whilst the Central Procurement Board (CPD) sits within the Department of Finance.

City Deals – A New role for Local Government?

City Deals, and more recently, Growth Deals, have been announced across Northern Ireland as innovative vehicles to bring together a range of partners, with significant finance to invest in transformational infrastructure projects. With two City Deals and two Growth Deals, which will cover across Northern Ireland, these will take on an even greater significance as key elements of wider post-COVID-19 economic regeneration planning. City Deals are a mechanism by which resources are targeted based on a deep understanding of regional needs and ambitions. Their goal is transformation of regional economies for the widest possible benefit.

Infrastructure is identified as one of the key pillars in the Belfast Region City Deal, the details of which is outlined below. It shows that significant infrastructure improvement projects are a key ingredient within a wider package of economic development measures.

Whilst the new larger council model has been in place for a number of years now there remains concerns about some's capacity to manage large projects. The delivery of the City and Growth Deal programme therefore offers an opportunity for local government to demonstrate its capacity or otherwise to manage large projects, especially around infrastructure.

The objective of the BCRD is described as:

'Belfast Region continuing to wrestle with the consequences of underinvestment in transport infrastructure, particularly public transport, and the resulting high levels of car use, pollution and congestion...Investing in infrastructure is also important in delivering balanced economic growth and ensuring that job opportunities that we are creating can be accessed by all communities.'

To practically deliver the aspirations containing in this statement, a wide variety of projects will be undertaken including Newry Southern Relief Road, Belfast Rapid Transit (BRT) Phase II and a new Lagan Bridge – Gasworks to Ormeau Embankment.

These projects should significantly improve infrastructure in a number of areas but it remains to be seen how effective bringing local and central government together will be, as well as a number of external partners including the private sector and academia. The added pressures of the COVID-19 situation and subsequent political pressures may impact on the overall process, but it is unlikely to impact at project level.

It is worth considering how the Deals will impact beyond the boundaries of the City of Belfast. The City Deal model as developed in England, Scotland and Wales, is based on the definition of a “city region” as a geographical area surrounding a single urban hub, on the basis of factors such as commuting distance. This model has driven the definition of the “Belfast City Region”, which comprises six council areas. City Deals are designed to enable investment in economic development priorities identified by partners at this local level.

In a region the size of Northern Ireland – in terms of both geographical area and population – the very close economic relationship between the two city regions, as well as the areas for which Growth Deals have recently been announced, is clearly relevant to the development of all of the Deals. It will be key to the economic success of all of the regions that NI as a whole is able to articulate its offering coherently to potential international investors.

The question of which is better – local or central – is one of particular interest in this consultation and we welcome views on this issue. There is certainly a need for greater co-ordination and hopefully these Deals will contribute towards that, both in terms of building relationships and creating effective mechanisms to deliver projects, both large and small.

Financing Options

The need for funding certainty is a prerequisite for efficient infrastructure planning and delivery. To understand the funding requirements, this statement from the Northern Ireland Audit Office report¹ highlights scale of public funding into Northern Ireland’s public infrastructure;

“Over the eight-year period to 31 March 2019, almost £10.6 billion was spent on Northern Ireland public infrastructure. Current estimates indicate that by 31 March 2021, a total of over £14.8 billion will have been invested in Northern Ireland (over a ten-year period). This exceeds the £13.3 billion anticipated in the latest Investment Strategy for Northern Ireland (ISNI 2011-21)”.

¹ ‘Major Capital Projects – A REPORT BY THE COMPTROLLER AND AUDITOR GENERAL 19 December 2019’

One of the issues facing the Northern Ireland Executive is the relatively limited sources of funding within its powers, and its continued dependence on wider spending decisions by the UK Government. A reluctance to impose additional charges inevitably reduces income and has an impact when significant infrastructure challenges arise. This will become an growing concern as public finances across the UK become increasingly strained and expectations rise that all parts find new ways of raising revenue and look to more innovative ways of financing major projects such as infrastructure.

Executive Ministers can borrow both to fund capital expenditure, and for a defined range of purposes not related to capital expenditure. In this paper we are concerned with the capital expenditure, currently they have the power to borrow up to £3billion for capital purposes. Capital borrowing facilities are available through the Secretary of State from the National Loans Fund.

- **Public Works Loans Board**

The Public Works Loan Board is:

'a lending facility is operated by the UK Debt Management Office (DMO) on behalf of HM Treasury. The facility provides loans to local authorities, and other specified bodies, from the National Loans Fund, operating within a policy framework set by HM Treasury'.

As we have set out elsewhere in this paper, there is a growing role for local government in managing and delivering large scale infrastructure projects. We are interested in considering this further, and ensuring Councils have both the capacity and expertise in this area. There is also the question in terms of financial capacity, options such as PWLB may be attractive but local government is already known to carry a sizable debt level, some more than others. There is a need to address this issue before adding to their responsibilities. We would be interested in views in this area specifically as part of this consultation.

In a Westminster written question, in June 2020, Gregory Campbell MP asked the Chancellor:

'if he would make an assessment of the potential merits of extending the remit of the Public Works Loan Board to include local councils in Northern Ireland'.

The Minister replied;

The Public Works Loan Board provides loans at lower than market rates for capital expenditure to local authorities in England, Scotland and Wales. The Local Government Finance Act (Northern Ireland) 2011 provides the legal basis which permits district councils to borrow and sets out the responsibilities of the council should they choose to do so. The Financial Provisions (Northern Ireland) Order 1983 is the legislation which underpins government lending from the Northern Ireland Consolidated Fund to local councils to support capital expenditure. This provides loans at lower than market rates for capital expenditure without extending the remit of the Public Works Loan Board to include local councils in Northern Ireland.

We will explore in our final paper whether this is sufficient or whether this option should be further explored in relation to expanding the borrowing options of local government.

- **European Investment Bank**

Despite the UK withdrawal from the European Union, the option of finance from the European Investment Bank remains available. EIB has already invested significantly in projects such as University and social housing, large scale investment projects. However, with the added dynamic of the UK's withdrawal from European Union, it remains to be seen how the new relationship with impact upon EIB lending. It is already an established process whereby EIB lends to non-member 'partners' across the world so the logical approach should be that this becomes the UK's new relationship but this remains to be determined, and may well feature as part of UK-EU negotiations.

- **Nordic Investment Bank (NIB)**

The Nordic Investment Bank was established in 1975, bringing together Denmark, Finland, Iceland, Norway and Sweden. More recently it was joined by Estonia, Latvia and Lithuania. The NIB includes a wide range of infrastructure areas within its remit including roads, digital, energy and water. In parallel, the Nordic Development Fund was established to focus on environmental projects. This model will be further researched as part of the consultation process, and it is noted that this region has already been examined for initiatives and best practice by Executive Ministers in recent years.

- **Private Finance Initiative**

This is one of the most recognised form of financing employed by governments in recent times. It essentially involves creating public-private partnerships, and using the private sector to develop and manage public infrastructure projects. The UK Government, was one of the first users of this option and it has been expanded by successive governments. It is now used extensively across the world.

Those in favour believe it brings private sector efficiency into public sector infrastructure development, whilst others believe it is too expensive and a perception that somehow the private sector has an expertise advantage over public sector partners. Whilst there are a number of projects in existence in Northern Ireland there is an increasing political skepticism in this model. We recognise there have significant problems with this model but we also believe that having learned from experience and past mistakes, this shouldn't mean that improved models cannot be developed which would improve the private-public partnership approach. The key is understanding past weaknesses and how these are addressed effectively.

It will be interesting to understand wider perceptions on the future of PFI in Northern Ireland through the consultation process.

The OECD² have previously researched this area and reported Public-Private Partnerships³ have been used sparingly in Northern Ireland:

“due, in part, to concerns over the overall level of exposure to long term commitments which are removing flexibility from.... departmental revenue budgets, particularly since the Northern Ireland Executive already borrows approximately £200 million per year from Treasury through the Reinvestment and Reform Initiative (RRI)”.

The Reinvestment and Reform Initiative (RRI), as mentioned above, was:

² OECD July 2016, Implementing Joined-Up Governance for Common Purpose.

³ NI Assembly Research Paper 'Planning, financing and delivering transport infrastructure' 2016

'designed to address the major deficit in infrastructure and to modernise key services. The Initiative targets services such as water, health, transport and education and intends to reverse the damage caused to Northern Ireland's public services by 30 years of focus on security issues⁴.'

This OECD report, also published in 2016 found that Northern Ireland invested the least per capita in its transport infrastructure of the twelve UK regions. However, it is necessary to look beyond the UK to understand better how transport infrastructure is central to a well-planned economy. A good example is Germany⁵.

Germany's transport infrastructure is considered amongst the best in the world, with an intensive network of railways, roads and waterways that is very well developed by international standards. Similar to Northern Ireland, it has an export driven economy that depends on high quality transport infrastructure, but especially since reunification it has struggled to maintain its highest standards and faces the same two issues as identified locally - access to funding and bureaucracy.

It is notable that lack of funding for maintenance of roads is being felt in a country so renowned for its network has such a significant impact. It currently has a significant backlog and demonstrates that no matter the continuous nature of investment required to maintain infrastructure quality. Another lesson is how pragmatic policymakers have adapted between public and private models, and the tensions that can arise in such areas.

For example, the construction and maintenance of Germany's trunk road network was traditionally funded entirely by the Federal government. However, as a result of budgetary pressures and increasing maintenance requirements, alternatives methods of private finance have been considered including a public-private Partnership was used to increase the capacity

⁴ <https://www.executiveoffice-ni.gov.uk/articles/about-strategic-investment-and-regeneration#:~:text=The%20Reinvestment%20and%20Reform%20Initiative%20%28RRI%29%20was%20designed,by%2030%20years%20of%20focus%20on%20security%20issues>.

⁵ World Economic Forum (2016) Global Competitiveness Report [online] available from: <http://nia1.me/3ip>. Roland Berger (2013) Planning and financing transportation infrastructures in the EU – A best practice study [online] available from: <http://nia1.me/3jt> 12 Roland Berger (2013) Planning and financing transportation infrastructures in the EU – A best practice study [online] available from: <http://nia1.me/3jt>.

of some congested motorway sections by adding more lanes. The construction and maintenance costs are financed out by HGV charges while passenger vehicles remain exempt. Another partnership model was developed to overcome local infrastructure bottlenecks on the interstate highway system such as bridges and tunnels, and is essentially financed by user charges.

Infrastructure Structures & Financing

The structure of infrastructure planning and financing in Northern Ireland is much more complex than may be expected to be the case. This is due to the autonomy enjoyed by the various government departments. The Department for Infrastructure is the lead body for many areas including roads, water and transport but other departments, for example, Health and Education, will be largely responsible for their own estates. This is a key point of debate, and we will welcome how this can be significantly improved through this consultation, in terms of improving value-for-money, removing duplication and improving delivery times, for example. Capital budgets in all these areas are determined by the Northern Ireland Executive. These will be guided by commitments in the Programme for Government and departmental priorities. Additional pressures will often emerge, for example the current needs of NIWater for additional funding to address its capacity issues. Given the constraints on public funding which are likely only to increase, capital spending decision making are largely responsive and based on immediate need. As set out in other parts of this paper, particularly digital, departments can tap into national programmes for specific projects.

There have been boosts to this funding via political agreements, for example most recently the Confidence and Supply Agreement between the Conservative Party and DUP enabled significant extra funding for projects such as the York Street Interchange and the upgrading of the local broadband network. There is also the opportunity for departments to bid for additional funds to address key areas within their remits, although most major projects should be agreed by the collective Executive. Departments will also closely work with their national colleagues, and often direct national funding will be available if a particular infrastructure project is being designed on a UK-wide basis. This is increasingly the case in areas around technology, broadband etc.

The various political agreements reached in Northern Ireland in the past two decades have also sought to address previous shortfalls. The Stormont House Agreement, reached in 2014, covered a number of areas;

The total value of the Government's package is additional spending power of almost £2 billion, including up to an additional £350m borrowing for infrastructure projects with a profile over four years with £100m in 2015-16, £100m in 2016-17, £100m in 2017-18 and £50m 2018-19. Subsequent political disagreements caused some of the momentum associated with this agreement to be lost but with the restoration of the Executive in 2020, a new opportunity was presented to implemented much needed improvements to infrastructure across Northern Ireland. The 'New Decade, New Approach' document has fifteen references to 'infrastructure' and includes the following commitments;

- *To boost the economy, the Executive will drive the delivery of essential infrastructure projects, including York Street Interchange, in order to build a Northern Ireland that is equipped for a prosperous shared future.*
- *The Executive will invest urgently in wastewater infrastructure which is at or nearing capacity in many places across Northern Ireland, including in Belfast, limiting growth.*
- *By April 2020, informed by a detailed stakeholder engagement process, the Executive will publish a new strategic level outcomes-based Programme for Government aligned to a multi-year budget with a sustained approach to public finances and prioritised investment in infrastructure and public services.*
- *There will be four key elements to the financial package: immediate support to the health service and to address budget pressures; investment to transform public services; turbocharging infrastructure delivery in Northern Ireland; and addressing Northern Ireland's unique circumstances. This investment sits alongside the separate financial package being put forward by the Irish Government.*
- *Turbocharging infrastructure, the Executive will benefit from increased funding for capital infrastructure investment as a result of the UK Government's infrastructure revolution. Infrastructure funding will enable the Executive to invest in a range of potential capital projects such as:*
 - *Essential sewage investment (Living With Water Programme)*
 - *'Better Connecting Dublin and Belfast' strategy*

- *A5/A6 roads*
 - *York Street Interchange*
 - *Narrow Water bridge*
 - *Capital and resource funding for the Medical School in Derry/Londonderry, subject to the Northern Ireland Executive's approval of the project.*
- *Conditions to promote sustainable public services transformation:*
- *There will be regular (quarterly) reviews of UK Government funding provided under this agreement, and implementation of all agreements via a UK Government - NI Executive Joint Board. This will be convened by the Secretary of State for Northern Ireland and will include the First Minister and deputy First Minister.*
 - *The Joint Board would have as part of its Terms of Reference in particular the oversight of transformation efforts in health, education and justice where these would draw on funding under this agreement (this does not displace other normally-required 55 approvals). As part of that oversight the Board would keep under review healthcare delivery structures in Northern Ireland, and be able to establish a separate sub-committee to consider health transformation in particular, drawing on external expertise as appropriate. The Board would also consider the effectiveness of infrastructure delivery, including drawing on expertise from the Infrastructure and Projects Authority as appropriate.*
 - *Connectivity and Infrastructure Specifically, as set out in the National Development Plan, the Government will update and enhance its commitment to jointly funding cross-border investment, once the power-sharing institutions are operational again. The Government wants to work with the Northern Ireland Executive and the UK Government to achieve greater connectivity on this island – by road, rail and air. We believe this is an immediate opportunity to move forward quickly together to deliver on plans to complete key infrastructure projects including the A5 and the Ulster Canal connection from Clones to Upper Lough Erne. The Government will deliver on its funding commitments to those projects, including a total of £75 million up to 2022 for the A5. The Irish Government is supportive of serious and detailed joint consideration through the NSMC of the feasibility of a high-speed rail connection between Belfast, Dublin and Cork, creating a spine of connectivity on the island, which could be progressed as a priority. The Government is also ready to jointly progress consideration of options for the development of the Narrow Water bridge project at the NSMC.*
 - *The Irish Government also intends to take forward a review of the potential for Government support to renewed viable air routes from Cork to Belfast and Dublin to Derry, working with the UK Government and Northern Ireland Executive to deliver improved connections as a priority.*

- *We believe there is enormous immediate potential for other projects, including Greenways in border areas, such as the Sligo-Enniskillen Greenway. We are ready to consider a further development funding application to be submitted in January and are committed to taking this project forward to deliver sustainable tourism and other enterprise benefits for the region.*

The impact of the COVID-19 situation has inevitably had an impact on timescales on many of the points in the agreement. The need for reassessment on these elements has also yet to be determined and we are interested in views on how this situation will have medium-term impact on infrastructure development.

The new post-EU era will bring significant change to funding with greater national investment replacing the various EU programmes locally. Bodies such as NI Water, responsible for water and sewage services receive their funding from the Department. In the case of local energy providers, NIE Networks owns the electricity transmission and distribution network and operates the electricity distribution network. This was privatised in the nineties and currently owned by private investors. This sector has also seen increasing innovation and private sector investment.

We are facing into an almost unprecedented period of challenge in respect to public finances, as the full impacts of the COVID-19 situation become more and more apparent. Despite bold pledges by the UK Government to ‘turbo-charge’ the economy by amongst other things, a huge rise in infrastructure spending, there will inevitably be concerns how this will play out in reality, especially if the economic difficulties increase as expected.

We believe there is a need for greater innovation in terms of financing. There are a number of options including;

- ***Public-Private Partnerships***

This is defined as a ‘long-term contract where the private sector designs, builds, finances and operates an infrastructure project...PPPs transfer delivery, cost and performance risk to the private sector – this protects the public sector from delays, cost

overruns and poor performance'. According to the Government website, to date, PPPs have delivered £56 billion of private sector capital investment in over 700 UK infrastructure projects. These include new schools, hospitals, roads, housing, prisons, and military equipment and accommodation. This model has been used in Northern Ireland where the Strategic Investment Board (SIB) is responsible for *'advising on the suitability of programmes for Public-Private Partnerships'*.

- **Government-owned Company Model**

A Government company ("GoCo") may either be wholly owned by the Government (100% share capital) or may be owned by the Government holding minimum of 51% share-capital, and private concerns/individuals. This model provides a level of commercial flexibility.

- **Mutualisation**

The government defines 'public service mutuals' as organisations with the following 3 characteristics: *They have left the public sector, continue to deliver public services and staff control is embedded within the running of the organisation*. This is often viewed as a potential future model for NI Water, following in the footsteps of Wales Water.

- **Privatisation**

The private operating and ownership of public service. This became common from the 1980s, with the UK Government privatising a number of industries including water, electricity, rail and many others. It has been criticised by many for putting private profit over public responsibility, while others argue that it improves efficiency.

In areas such as roads and water, there are challenges around funding big investments, and controversial funding streams such as road tolls and creating stand-alone water charges, controversial each in their own right, are part of the mix in other parts of the UK and beyond. Whilst some options remain politically unacceptable and the issue of additional local taxation or charges a greater problem in a poorer region, there must be a debate on how additional finance can be raised in order to fund future spending.

The role of the Executive is critical in understanding how we can further develop this financing. There is the immediate question as to whether borrow powers should be extended and whether additional areas of taxation should be devolved locally. We welcome views on these questions but in the context of infrastructure spending only. With new roles being formed as a result of Brexit, we will consider how this will impact on relationships with international institutions such as EIB, and how these can best be harnessed locally for future major projects.

Questions

1. Should an overarching delivery body be created in Northern Ireland to oversee all aspects of infrastructure delivery? what model should such a body potentially have?
2. What should the future role of the private sector be in infrastructure projects in Northern Ireland?
3. As public spending becomes increasingly constrained, what alternative methods of finance should be considered to invest in local infrastructure projects?
4. How can we ensure the City and Growth Deals across Northern Ireland encompass the widest audiences?
5. Should more fiscal powers be devolved to the Northern Ireland Executive? and how could the Executive expand its borrowing capabilities?
6. Should the PWLB be extended to Northern Ireland and how should this be developed?

Digital Infrastructure

Northern Ireland has a high-quality digital infrastructure in place, evidenced by its attractiveness to many of the FDI companies currently locating in Northern Ireland, especially those in sectors such as financial technologies, cyber security and creative industries. On its website, Invest NI, the agency responsible for economic development, InvestNI states:

'Northern Ireland has a great communications infrastructure and the region enjoys international connectivity at a very competitive cost... NI is one of the first to operate high speed, next-generation

services with a 100-gigabyte per second transatlantic and terrestrial telecommunications link between Northern Ireland, North America and Europe.'

This is also a continuously advancing area of infrastructure requiring significant ongoing investment. There is a continuing debate around broadband coverage and whilst 'Project Spectrum' is expected to address many of the 'blackspots' the DUP believes that further work is required to ensure every property has access to quality broadband. It is vital for a number of reasons including social inclusion, promoting entrepreneurship and ensuring Northern Ireland remains economically competitive as we build out the 'fourth industrial age'.

In parallel with 'Project Spectrum', another significant project, led by local government collaboration, will receive approximately £15m to further boost fibre availability across Northern Ireland. The funding comes from the Department for Digital, Culture, Media and Sport (DCMS) through its Local Full Fibre Networks Programme (LFFN). This is an example, highlighted later in this paper, of local government taking the lead on major infrastructure projects, especially those with a major local aspect of delivery. The main area of weakness in the current network is substantial gaps in coverage even at a basic level. This is mainly, but not exclusively, in rural areas and there remains parts of Belfast with weak connections.

All local councils with the exception of Belfast will deliver this project, whilst Belfast will deliver a similar standalone project focused from the same LFFN programme, designed to:

'install an extensive fibre network connecting approximately 100 council buildings, and will cover areas of the city set to benefit from local regeneration'.

To put this investment in context, at the time of these announcements, the vast majority of the UK had access to superfast broadband, only a tiny 3% had access to gigabit-capable full fibre infrastructure. In the context of Northern Ireland, the size of the area is such that complete coverage should be deliverable. The greater Belfast region is generally viewed as the key economic driver but with the economic potential across the province increasing, this area of infrastructure is absolutely vital. There is a debate in terms of prioritising investment to ensure all parts have a basic level against further investment in already-connected parts

which require upgrades. We will welcome views on this question as part of this consultation process.

Due to the technical nature of digital communication services, government is dependent on procuring private sector suppliers to build, maintain and upgrade digital infrastructures. Such a network will be essential for Northern Ireland to compete economically. The fourth industrial age will require access to the latest digital technologies, ultra-fast broadband connections and the latest in cyber-security to protect those industries emerging locally and at the heart of a future Industrial Strategy. Sectors such as Advanced Manufacturing and FinTech will flourish if we continually invest in upgrading this area. Northern Ireland is regularly ranked as top destinations for FinTech investments, with significant capacity to grow even further. Most recently Northern Ireland made top ten in global rankings for 'tech cities of the future'.

Finally, the introduction of 5G is said to potentially have a transformational effect on economic and social development. 5G technology offers mobile speeds 10 to 20 times faster than previous generations. It was previously announced that ten rural locations across the UK including Northern Ireland, will be chosen to test 5G applications through the Rural Connected Communities competition. This is alongside private sector operators installing their own 5G technology. With the growth of technology-led sectors key to future employment in Northern Ireland, the need for 5G technologies will become increasingly important in what is a constantly competitive race to attract and retain both indigenous and foreign companies. We are keen to focus on this area in the consultation process and it will be a key element of a finished policy paper.

Questions

1. What is your current view of the digital infrastructure across Northern Ireland?
2. How will the introduction of 5G technology impact our economic development?
3. What is the most effective way to deliver continuous improvement in this area of infrastructure?
4. Are there alternative means of financing this network?

5. The need to address remaining gaps in broadband coverage across Northern Ireland and this is financed, both initially and continuous improvements.
6. Ensuring local businesses, principally SMEs, maximise their digital potential.
7. Will finance continue to be made available by both the Executive and UK Government to ensure NI benefits from the latest digital technologies?
8. Are we heading towards greater alignment with the ROI in terms of digital infrastructure, especially from an economic development perspective?
9. How will need to expand our digital infrastructure if work patterns are changed as a result of the COVID-19 situation, and remote working becomes more common?

Road Infrastructure

Perhaps the most contentious area of infrastructure development. Northern Ireland has a quality road network, although it is not immune to the problems of congestion and increasingly, deterioration.

There is a need for firm decision-making at the highest levels, which will determine the future of local road infrastructure. Key projects in Northern Ireland such as the A5 expansion and the York Street Interchange Project have been stalled due to legal and procurement challenges. With a growing demand for more emphasis on 'green mobility' there are increasing challenges to the expansion of the road network, one that some are seeking to build upon as a result of the COVID-19 situation. There is a debate regarding local differences in terms of roads infrastructure which must be addressed.

There is also the issue of future financing the construction and maintenance of a modern road network. To date central government finance has been the traditional means of paying for our network via the UK Government subvention. There are alternative methods alternatives, however, primarily the building and operation of Toll Roads. Such examples exist across the world, including in the Republic of Ireland and in Great Britain, and it is a debate that needs to happen in Northern Ireland.

In parallel, with road infrastructure, there is a need to consider how we can best help support the development of the Greenway network across Northern Ireland. This has been referred elsewhere in this paper and we believe that it is a perfect example of how we can reinvent existing route infrastructure (for example, in the case of the Comber Greenway the old railway network). Greenways are a great way to encourage cycling and walking and can be integrated with road networks to provide safe routes of travel. We believe there are significant social and economic benefits and should be encouraged through an enhanced strategy, led by Department for Infrastructure but with input from other departments.

Questions

1. What areas of the existing network require significant investment within the next five-to-ten years?
2. How best can we develop a new strategy which better accommodates motor vehicles and cyclists on roads?
3. What is your opinion on the introduction of road charging?
4. What other innovative approaches to finance should be considered in this area?
5. How can we best strategically develop the Greenway network across Northern Ireland?
6. Whilst there has been debate on 'green mobility' within urban communities, how can we ensure it reaches everyone in Northern Ireland?

National Infrastructure and Regional Interconnectivity

This paper primarily focuses on financing regional infrastructure but what it links into can be as important to supply chains and systems. Whether it is digital, energy or physical linkages the better the system they link to and integrate into the better.

The DUP believes the United Kingdom should be ambitious and seek to improve infrastructure links with all parts of the United Kingdom. The potential of too much of the UK has been untapped with a London-centric approach and outlook. There is much to learn from the Nordic countries in how to prioritise infrastructure and be ambitious in seeking new solutions and in response to COVID infrastructure should be a key priority.

We note the government's interest in cross-channel infrastructure of a bridge or tunnel. We look forward to more detailed examination of and hopes it leads to a feasibility study as first proposed in our 2015 manifesto. The North Channel route is considered a European Super-highway but there is nothing super about it. However, this is a case in point of how national infrastructure can fall between two 'regional' stools – NI can't pay for it and the SNP led Scottish government are not interested in it.

It is arguably the most expensive piece of sea to cross in Western Europe (new environmental levies have added to these costs) and it links into amongst the two worst 'A' roads in Scotland. As neither of these roads are particularly important to broader Scottish economic needs, they remain a consistent low priority for investment. Their importance to NI is not a consideration. The high costs and time costs of poor infrastructure are ultimately incurred by NI businesses and consumers and the forgotten communities of the area in Scotland. Some businesses opt for RoI to Wales sea routes as a speedier and safer alternative.

Furthermore, with the intention to further develop the Northern Powerhouse there is a clear incentive to improve connectivity for Northern Ireland. These problems have been left for too long and if we wish to drive the NI economy forward, one of the strategic connectivity issues we need to address along with issues like the expansion of Heathrow.

Another recent development has been the establishment of an infrastructure commission for NI mirroring the National Infrastructure Commission.

Questions

1. What other interconnectivity priorities to national infrastructure are there for NI?
2. How can regional infrastructure interconnectivity issues involving other regions be identified and agreed and funded for action by the responsible devolved administration or national government?
3. What should be done to improve North Channel super highway?
4. What relationship should be developed with the National Infrastructure Commission by its NI counterpart?

Water Infrastructure

One of the most pressing infrastructure issues emerging is the decades long infrastructure deficit on the water network across Northern Ireland, in particular waste water. There have been clear warnings on the impacts of future development should this issue not be satisfactorily addressed. It has arisen as a result of historic underinvestment, coupled with an expanding demand. In their own words, NI Water (NIW) points to the scale of investment to date, and its impact;

“Delivering high quality water and wastewater services that Northern Ireland requires to meet the demands of a growing 21st century economy, will take time and will cost money. We are investing approximately £2m per week in water and wastewater services across NI. £1.9 billion has been invested in Northern Ireland’s water and sewerage infrastructure over the last ten years....Delivering an improved infrastructure within the budget constraints set for us is one of the most challenging jobs facing any organisation in the water and sewerage sector – but the achievement of our objectives will result in major benefits to public health, the environment and the economy”.

The emerging challenge is how this investment can be sustained, what funding model best suits future investment projects. To date there have been calls for funding but no clear direction as to how the current shortfall can be addressed, or how long-term investment can be determined.

There are structural models open to the NIWater and its stakeholders including full privatization, a ‘Go-Co’ model or mutualization. Such models would assist with accessing cheaper sources of finance, but taking all this into consideration it is perhaps a sad indictment of public policy that this issue remains one for debate today. To date an updated model has not been agreed despite considerable debate. The organisation itself has been increasingly vocal in its demands for greater flexibility around funding which has escalated recently to highlighting its future intention to advise against development until substantial funding can be found to address water and sewerage capacity issues, especially in the greater Belfast area.

In the past, the Assembly itself has taken significant into how water services would be provided and paid for in the future. As far back at 2011, its Public Accounts Committee produced a report '*Measuring the Performance of NI Water and Procurement and Governance in NI Water*'. The report contained a number of comments and recommendations relevant to this consultation;

- *Under the Water Reform process, responsibility for water and sewerage services transferred from the Department for Regional Development's Water Service to Northern Ireland Water (NI Water), a government owned company (GoCo), in April 2007. A system of economic regulation similar to the rest of the UK was also put in place. This process was intended to improve both quality and efficiency of service provision and has major implications for public expenditure in Northern Ireland.*
- *Although increased investment has resulted in service improvements in recent years, benchmarking NI Water with other GB companies continues to identify performance gaps in most areas and indicates scope to improve efficiency. To match GB performance NI Water would need to provide a better service at about half the cost.*
- *Benchmarking is a widely used process to determine the scope for improvement by comparing company performance with industry best. The Department argued strongly that both the Audit Office's and the Regulator's comparisons with GB performance were not valid because of a legacy of underinvestment in Northern Ireland. The Committee requested evidence to support this position but found a considerable disconnect between the oral and written evidence. The Committee does not accept the Department's objections and believes that it needs to show a greater level of maturity in actively pursuing improvements rather than trying to justify existing poor levels of performance.*
- *NI Water has the potential to reduce its operating costs by around 40 per cent and additional scope for capital savings. The Regulator has set a target to close about 65 per cent of this efficiency gap by 2013, but the Department has not signed up to the second and third years of this plan because of an uncertain funding position. The Committee believes that there is an urgent need to address this issue.*
- *Economic regulation of the water industry in GB has delivered consistent efficiency improvements, and under Water Reform a similar role was envisaged for the Northern Ireland Regulator. However, it is clear that the current hybrid governance arrangements and the lack of customer charging provide a set of circumstances for the Regulator which is unique in a UK context. Nevertheless, irrespective of how the service is funded, an independent regulatory regime has the potential to play an important role in the identification and delivery of real and meaningful efficiencies. The precise role and nature of the*

regulatory regime will need to be clearly defined to ensure the system operates for the benefit of both the taxpayer and the customer.

Whilst a large number of recommendations were made, many of these related to procurement issues and internal governance. There were also a number of recommendations relating to governance and finance and they are outlined below;

Recommendation 15

The Committee recommends that DFP ensures that, in future, the external auditors of NI Water and any other arm's-length bodies constituted as companies not audited by the C&AG, should be required to provide an opinion on the regularity of income and expenditure.

Recommendation 16

The Committee recommends that a new governance agreement in the form of a Management Statement/Financial Memorandum should be put in place between DRD and NI Water for as long as NI Water continues to receive large amounts of public funding. This would provide the degree of oversight normally expected between a sponsoring department and an NDPB. The Committee is aware that such documents often take an inordinately long time to prepare; therefore DRD should work with DFP to fast track this process for NI Water.

Recommendation 17

The Committee recommends that DRD require NI Water to immediately implement, in full, all DFP guidance on the management of public money which is applicable to public bodies in Northern Ireland.

Recommendation 18

The Committee recommends that, as a priority, DRD conduct a fundamental review of governance arrangements in all its arm's-length bodies. This review should revisit and reinforce the recommendations of the Committee's report on Good Governance.

Recommendation 22

The Committee recommends that all public bodies constituted as companies and subject to companies' legislation must be required to adhere fully to the good governance requirements now set out in the UK Corporate Governance Code. It should fall to the departmental Accounting Officer to ensure that this happens.

Whilst there has been further recognition of the needs for improvement to water and sewerage services, the debate continues with respect to water charges and structural reform. The most recent, draft Programme for Government 2016-2021, references plans for improvements to water and sewage infrastructure as an outcome;

- *Outcome 13: We connect people and opportunities through our infrastructure This outcome is about ensuring that we plan and invest in infrastructure to facilitate economic growth. It involves improving the physical mobility of people, and the provision of essential energy, water and telecommunication services to ensure that our communities can access social, economic and cultural opportunities. This involves tackling some of the key barriers to balanced regional growth and inclusion.*

The Role of the Executive We will make our contribution by:

- *Providing high quality transport infrastructure.*
- *Providing high quality public transport.*
- *Working to increase availability of access to high quality telecommunications.*
- *Providing water, waste and energy services to the whole community.*
- *Supporting public service delivery through the public sector's physical assets, including housing.*
- *Building sustainability through improved waste recycling infrastructure. In respect of this outcome, we will work, amongst others, with communications providers, with the construction sector, with housing providers, with the environmental sector and with transport providers to achieve these aims.*

Other parts of the UK have different corporate structures - England has embraced a full privatization model with water and sanitation is provided by twelve water and sewerage companies. This would be politically unacceptable in Northern Ireland and there is no immediate prospect of a similar model being replicated locally.

In contrast, Welsh Water is structured as a mutual, run solely for the benefit of customers. This model is designed to reduce Welsh Water's asset financing cost and to do date has been effective. Its assets and capital investment plans are financed by bonds and whatever financial surpluses have been accumulated. The company website highlights the positive impact of this model;

“Financing efficiency savings to date have largely been used to build up reserves to insulate Welsh Water and its customers from any unexpected costs and also to improve credit quality so that Welsh Water’s cost of finance can be kept as low as possible in the years ahead”

This is an area which will be explored in depth during the consultation process, looking further into the lessons can learn from other parts of the UK as well as examples further afield.

There is an added dimension to the local debate - domestic water charging. The IIRC have previously presented three options - public revenue including in rates, water as standalone but identified part of rates bills or standalone water bills. This is one issue which all parties have broadly agreed upon to date not to proceed with. The DUP is opposed to the introduction of domestic water charging in Northern Ireland and will not support any proposal to introduce charges.

Energy Infrastructure

This section will be closely aligned with another party policy paper, ‘*Green and Pleasant Land*’ which is also in the development stage. Clean energy is a key element of this paper therefore the synergies are clear.

The draft industrial strategy rightly states that:

“investment in our infrastructure is vital to provide the physical and digital connectivity to allow Northern Ireland to compete on the global stage.”

Northern Ireland currently has three main power stations - Ballylumford, Kilroot and Coolkeeragh, relying on a mix of fuels. In the coming years those at Ballylumford and Kilroot are to be decommissioned due to environmental restrictions, meaning there will be a significant reduction in the amount of electricity being produced. This requires a solution and innovative thinking.

Building a strong energy infrastructure is vital to successfully promote Northern Ireland globally. Modern energy needs are rapidly expanding with the growth of ‘new’ sectors such

as those outlined earlier in this paper. In a 2019 report, the UK Committee on Climate recognised that Northern Ireland:

“has excellent opportunities to support the wider roll out of electric vehicles, home energy efficiency measures, and renewable electricity”, but went on to express concerns that ‘existing policies will not be enough to meet recommended climate goals’.”

There is a long-term plan within the Department for Economy, planning long-term for energy supply and demand up to 2050, based on three key elements - electricity, heat and transport.

Northern Ireland’s energy policy is built on the three policy objectives, which are common to most regions;

- *Sustainability*
- *security of supply*
- *competitiveness*

There is need for stable policy and regulatory direction. The development of high-quality energy infrastructure, including cross-border interconnectors, underpins the three policy objectives.

There is also scope for Northern Ireland not only to develop solutions for its own energy reliance, but also to be a leader in innovation and the development of sustainable energy technology. Already the local private sector has a strong reputation for offshore wind and wave energy, and with ‘green technologies’ explicitly referenced in a number of government economic strategy papers, it is clear that this area of economic development has potential in Northern Ireland. The private sector is also playing a key role in energy generation through new projects such as the Belfast Power Station, and must be factored into policy thinking. The involvement of international private investors in this scheme demonstrates the attractiveness and potential of projects such as this.

The draft Northern Ireland Industrial Strategy will be central to the updating our energy direction, and to an extent guide the development of the policy. Many key growth sectors are energy intensive therefore requiring supplies taking into increasing environmental awareness

and demands. It is also worth noting that it is still too early to determine economic impacts of the COVID-19 situation and its long-term impacts of sectors previously identified as key growth areas. This will inevitably have implications for energy demands once it becomes clearer.

Questions

1. A programme of retrofitting properties, private and commercial, how can this be best achieved?
2. The role of the private sector in the power generation process?
3. Future incentives for energy efficiency – how can these be best achieved?
4. What does the future mix of renewables look like?
5. How best should Northern Ireland to the need for energy security?
6. How can micro-grid option be developed? What are the implications for wider energy strategy?
7. How can we best achieve ‘affordable decarbonization?’
8. How can we increase greater innovation into the local energy network?
9. Does the Inter-connector network remain central to our future energy strategy?
10. What is the future of the local renewable energy market in Northern Ireland?

The Growth of Hydrogen

The growth of the hydrogen sector in Northern Ireland has been rapid and offers many new business opportunities for both new and existing companies. We have the potential to become a leader in hydrogen technology, building on our reputation for innovation, whilst also increasing the efficiency of our windfarm network.

For example, a new generation of buses will be powered by hydrogen fuel. This will be built locally at the Wrightbus factory in Ballymena. In simple terms the buses work by passing hydrogen into a fuel cell where a chemical reaction creates an electrical current to drive the bus. The only thing that comes out of the tailpipe is water. What is significant is that Northern Ireland companies have the capacity to build the vehicles as well producing the fuel. This

creates significant opportunities and again puts Northern Ireland at the forefront of new technology.

A proposed figure of approximately £15m has been suggested by various elected representatives as being required to reach that leadership position, a comparatively modest sum in industrial terms. This would build on advanced academic research and development of hydrogen technology at Queen's University Belfast, Belfast Met and Ulster University, utilising the natural resources essential for the production of hydrogen – wind and water.

We believe there is considerable potential to build this sector, and in these challenging times, the potential for significant growth in this area of our advanced manufacturing sector is especially welcome.

Questions

1. How can we best build a hydrogen infrastructure in Northern Ireland, bringing together business, academia and other relevant parties?
2. What existing sectors have roles to play in developing this sector and how?
3. What opportunities exist for start-ups to move into this sector?
4. What financing methods are most appropriate for this sector?
5. How can this sector play a role in a wider 'Green Recovery' plan?

Summary

It remains too early to determine how the global pandemic will influence change across the globe. The early determinations that 'nothing will be the same again' following crises are often replaced by the harsh realities of economic life. Infrastructure is an area where notice if change is to happen – the reduction in business travel with increasing online communication tools, a reduced need for large-scale office developments, the reduced demand for cars, with alternatives forms of transport increasingly demanded – public transport and safe cycling infrastructure. Whilst some will happen incrementally, there is a danger some Ministers will seek to implement 'pet projects' without a strategic direction or planning.

Northern Ireland faces major policy decisions in terms of its future infrastructure development, in a number of key areas. In comparative terms it is well developed, and while investment was consistently lower throughout the Troubles it has benefitted from considerable funding in the aftermath, via a number of sources. As well as funding, the failure of governance and effective delivery structures have had major impacts on delivering many (especially larger scale) infrastructure projects. Water infrastructure is the becoming the most visible manifestation of this problem, but other areas such as digital require almost constant investment in a world where new companies require the fastest and latest digital support to be competitive. Equally environmental pressures are demanding the increasing use of renewable sources and to meet commitments there will need to be a radical overhaul of energy infrastructure. In all these areas innovation will be increasingly important and partnerships between the public and private sector. A new Northern Ireland industrial strategy should reflect the need to encourage innovation approaches, for example the Small Business Research Initiative (SBRI) has been extremely successful in solving comparatively smaller scale issues. Why wouldn't this model be considered for the big infrastructure challenges of our age?

There is an emerging debate on future infrastructure needs in the context of post-COVID19 regeneration. There is a public determination to rethink areas such as city centre road infrastructure, cycling infrastructure, changes in demand for office accommodation and many

others. It is yet to be seen whether this initial enthusiasm will be translated into departmental action plans.

This debate will also take place in the context of considerable challenges on public spending and the need for a greater willingness to consider hard decisions and implement what may not necessarily be popular with the general public. There are the complex political considerations in Northern Ireland but all should be willing to consider innovative methods of financing and funding while retaining the public-owned ethos. There is a vast range of international best practice and professionals to draw upon and

This can only be achieved if delivery structures are agreed which reflect the need for a modern, flexible attitude towards infrastructure delivery. The best organisations minimize bureaucracy and encourage co-working and co-design. Too often report after report highlights the same concerns. That is no longer credible. That is the challenge for Northern Ireland to overcome.

The various questions are not exhaustive and we will welcome additional comments and suggestions throughout the consultation process.

Please contact George Dorrian – georgedorrian@dup.org.uk to submit responses, or to arrange an online meeting to discuss any of the issues raised. The deadline for responses is 7th November 2020.