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The Panel was chaired by Kirsty McManus (Institute of Directors) and comprised of the representatives/members of the following key organisations:

- Jenny Green, Institution of Civil Engineers (ICE)
- Ashleen Feeney, Confederation of British Industry (CBI) Member
- Freddie Patterson, Chartered Institution of Highways and Transportation (CIHT) Member
- Richard Johnston, University of Ulster Economic Policy Centre (UUEPC)
- Craig McGuicken, Northern Ireland Environment Link (NIEL)
- Stuart Cairns, Bird & Bird LLP (International Law Firm)

### Background

A modern and well maintained, sustainable infrastructure system is essential to deliver economic growth; provide a key building block for prosperity; address regional imbalance and support a thriving region where people want to live, work and invest. Such an infrastructure system will also play a key role as part of the post-Covid-19 recovery and in addressing the climate change challenge.

The Minister for Infrastructure has taken account of the views of key stakeholders on the need for a long term approach to infrastructure planning and delivery and is keen to develop a proposal, informed by partners and experts, which explores the establishment of an Infrastructure Commission for NI. The Minister is therefore establishing an Expert Ministerial Advisory Panel on Infrastructure to prepare a document which will progress this objective.

### Role and Purpose

The Ministerial Advisory Panel on Infrastructure will be appointed by the Minister for Infrastructure and will be tasked with considering how an Infrastructure Commission for NI might support more effectively the long-term planning and development of relevant infrastructure here.

### Scope

The Ministerial Advisory Panel will focus on developing a proposal that will identify the specific role and value of a Commission and how it might be established and might operate. The Panel will also consider the options for a Commission's structure and operation, to take account of possible cost models, examining systems in other such bodies around the world. Its scope will reflect the "hard" infrastructure that falls within the remit of the Department for Infrastructure, namely, water, drainage and inland waterways, public transport, roads and cycling infrastructure. To ensure the development of a series of holistic recommendations, the Advisory Panel may also give consideration to the appropriateness of any future Infrastructure Commission having a remit beyond that infrastructure which falls within the immediate remit of the Department for Infrastructure but this will not be part of its formal remit.

### Objectives

Issues associated with addressing infrastructure supply and demand at a regional level, have the potential to be wide and far reaching. The objectives set out below are intended to provide focus and direction for the Ministerial Advisory Panel.

- To consider the approach to relevant infrastructure across these islands and make recommendations on the need for an Infrastructure Commission in NI and the benefits it would bring.
- To consider the role of a commission in supporting the Minister's objectives of delivering cleaner, greener, sustainable and inclusive infrastructure.
- To advise on the potential role and function of a NI Infrastructure Commission in relation to the Minister for Infrastructure's responsibilities.
- To produce a report for the Minister for Infrastructure, detailing recommendations on the way forward and to inform the Minister's preparation of a wider proposal for submission to the Executive in September/October 2020 as part of NI's Covid recovery and Brexit planning.

Members of the Panel will be responsible for:

- Sharing specific skills and experience; and
- Providing expert, impartial advice.

The Department for Infrastructure (Regional Planning Directorate) will provide a secretariat to the Ministerial Advisory Panel on Infrastructure.

## Timing

The intention is that the Ministerial Advisory Panel will undertake a short, sharp, focused exercise to address the objectives set out above. Given the wider economic and environmental context, it is appropriate that the Panel is formed and commence work in a timely fashion. It is therefore anticipated that the Panel will meet as required during August and early September 2020 and that it will present a final report, including a series of key recommendations to the Minister for Infrastructure by late September 2020.

## Literature Review

A desk-based review of relevant resources has been undertaken to set the aforementioned key challenges and the existing policy and organisational frameworks which influence the planning, delivery and implementation of infrastructure projects in NI in a wider context.

A consistent theme across the literature is the need for a stable long-term direction to infrastructure investment that retains the flexibility needed to deal with uncertainty over long horizons. It is argued that this can be a challenge for governments.<sup>20</sup>

### The National and International Perspective

The Institute for Government (2015)<sup>21</sup> identify a range of issues including short-sightedness and lack of forward-looking strategy; failure to secure cross-party agreement; serious weaknesses in the evidence base and frequent inability to secure local community consent as factors which impact on the way the UK makes strategic infrastructure decisions. These problems, it concludes, stem from 'gaps in the institutional architecture for infrastructure investment decisions' and the lack of 'strong deliberative institutions that effectively engage politicians, experts, interest groups and local communities in the policymaking process.' **These institutional gaps are viewed as leaving the political process exposed to unconstructive interactions between party-political tactics, pressures from interest groups with legitimate claims on infrastructure decisions and hostility from local communities to individual projects.** There is therefore a compelling need for governments to shift their mind set and define future infrastructure challenges in terms of service outcomes and ensure city, state and national network arrangements can work together coherently to meet the changing needs and expectations of customers and the community.<sup>22</sup>

These views are also supported by the OECD<sup>23</sup> who indicate that political dynamics may undermine sound decision making with regards to infrastructure and that coordination across all levels of government can be difficult as regional preferences do not always align with national ones. It is proposed that better public investment coordination and governance can materially boost investment outcomes and that independent, formal mechanisms and bodies that coordinate investment in infrastructure can create the strong institutional framework that is necessary for infrastructure delivery. It is further suggested that **successful governance of infrastructure depends upon a coherent strategic planning process; an open and transparent prioritisation mechanism and decision-making processes based on affordability and cost efficiency; a clear regulatory and institutional framework; robust coordination across levels of government and evaluation mechanisms that monitor performance.**

The Institute for Government<sup>24</sup> reinforce these views, highlighting that **the absence of a national strategy for infrastructure can result in uncertainty, delays and increased costs for taxpayers and consumers.** This, they argue, is not necessarily the fault of individual organisations or people but due to '*systemic problems with government institutions and the politics of infrastructure decision making in the UK.*' The need for a credible evidence base and long-term approach are considered essential to prevent infrastructure decision making being subject to continuous and disruptive policy change. This view is further supported by the World

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<sup>20</sup> Strategic Infrastructure Planning: International Best Practice - International Transport Forum Policy Papers, No. 29 Case Specific Policy Analysis (2017)

<sup>21</sup> Political Economy of Infrastructure in the UK, Institute For Government, 16 December 2014

<sup>22</sup> Shifting Australia's Infrastructure Mindset to the Long Game, John Grill Centre for Project Leadership, The University of Sydney, September 2016

<sup>23</sup> Getting Infrastructure Right: A Framework for Better Governance (2017)

<sup>24</sup> The Institute for Government, How to design an infrastructure strategy for the UK, 01 December 2017

Economic Forum<sup>25</sup> who suggest that the policy and regulatory environment must be modernised to create a flourishing ecosystem of infrastructure innovations and that creating the right partnerships between the public and private sectors can produce effective policies and fully informed strategies.

These matters remain to be addressed, with the House of Commons Public Administration and Constitutional Affairs Committee<sup>26</sup> recently being advised that:

- infrastructure investment needs to be properly co-ordinated if it is to achieve the most benefit;
- government needs to take a cross-departmental approach and improve co-ordination between complementary projects across the wider portfolio of infrastructure investment;
- the more long-term view needed when planning infrastructure can often be hindered by a desire for quick outcomes within parliamentary cycles; and
- infrastructure priorities and spending need to be depoliticised

## A Local Perspective

The issues identified at international and national level are also evident more locally. The Irish Academy of Engineers (2011) suggest that both the Irish and Northern Irish Governments are severely constrained in their ability to invest in infrastructure because of the lack of available capital and that there is a requirement for sustained investment in critical infrastructure to permit essential economic growth.<sup>27</sup> A specific need, in NI, to eliminate stop/start programming of infrastructure and place greater emphasis on multi-annual longer-term plans is also identified.

A similar commentary is outlined in a NI Procurement Board review of the commissioning and delivery of major infrastructure projects in NI which concludes that *'the 'decentralised' model reinforces departmental silos; increases competition in the prioritisation of projects; makes it more difficult to generate efficiencies through economies of scale and incurs additional costs.'*<sup>28</sup> Similarly, a 2013 review of the commissioning and delivery of major infrastructure projects in NI found that, 'the system as a whole is not fit for purpose and works against best endeavours to deliver.'<sup>29</sup> A more recent NIAO report<sup>30</sup> suggests that *'the existing cumbersome governance and delivery structures within the NI public sector are not conducive to maximising the achievement of value for money;'* that the current commissioning and delivery arrangements are not fit for purpose and that there is a need to eliminate duplication in administrative functions and institutional frameworks; improve project prioritisation; reduce bureaucracy by focusing more on *'within budget'* and *'on time'* delivery, rather than on process.

The importance of environmental and climate issues within infrastructure has been highlighted in a number of reports. The Institution of Civil Engineers set out 12 Guiding Principles<sup>31</sup> for prioritising and planning infrastructure. They noted that the UN Sustainable Development Goals provide a blueprint which will protect our planet's fragile ecosystems, while making sure that every person can flourish. However, there can be no sustainable development without connectivity, and for that we need better infrastructure. The OECD have similarly written that the economic recovery from the COVID -19 crisis needs to be durable and resilient<sup>32</sup> – a return to 'business as usual' and environmentally destructive investment patterns and activities must be

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<sup>25</sup> WORLD ECONOMIC FORUM Community Paper - Transforming Infrastructure: Frameworks for Bringing the Forth Industrial Revolution to Infrastructure (November 2019)

<sup>26</sup> Delivering the Government's Infrastructure Commitments through Major Projects – Third Report of Session 2019 -21 (28 July 2020)

<sup>27</sup> The Cost-Effective Delivery of Essential Infrastructure, The Irish Academy of Engineering / Forfas, June 2011

<sup>28</sup> NIAO Report 2012 Procurement Board review

<sup>29</sup> NIAO Report 2012 Procurement Board

<sup>30</sup> NIAO Northern Ireland Audit Office, Major Capital Projects, Report by the Comptroller and Auditor General, December 2019

<sup>31</sup> Enabling Better Infrastructure, Institution of Civil Engineers

<sup>32</sup> Building Back Better : A sustainable, resilient recovery after COVID-19, OECD, June 2020

avoided. They highlight the need for a holistic approach to the recovery, which focuses on well-being and inclusiveness, and is based around 5 pillars: aligning with net zero GHG emissions; strengthening climate resilience; reducing biodiversity loss; innovation building on behaviour changes; and improving supply chain resilience and circularity.

## *The Role of Independent Infrastructure Agencies*

The World Economic Forum <sup>33</sup> advocates the establishment of an independent infrastructure agency as a means of addressing those issues outlined above and proposes that such organisations can:

- offer a system-wide vision of infrastructure which crosses the boundaries of government bureaucracy;
- contribute to better communication and transparency by conducting and publishing reviews of projects and publishing lists of prioritised projects based on diligent cost-benefit analysis;
- help support the process of rethinking infrastructure needs and planning;
- potentially take charge of establishing a list of prioritised projects and oversee management of an infrastructure trust fund to protect from risk of a political government removing funding.

The International Transport Forum <sup>34</sup> also highlight the role of independent commissions in creating the political space for consensus to be achieved and their potential for liberating the strategic infrastructure planning process from the short-term stresses of elections and leadership challenges. It is suggested that the establishment of an independent statutory body to lead the process is the most promising way of anchoring spending to a long-term funding commitment independent of the election cycle. This type of institutional structure will also have the benefit of enhancing transparency and should help to increase the longevity of infrastructure plans and ultimately reduce the cost of projects.

Notwithstanding the above, the Armitt Review <sup>35</sup> highlights that the aim of a Commission is emphatically not to take power away from politicians, but rather should make it easier for politicians to take difficult decisions on controversial, technically complex issues which are vital to economic success and where time horizons are well beyond the lifetime of any one Government. The Review also emphasises the importance of any Commission having a clear remit and clarity as to what it is there to do. This will not only achieve political consensus but will also provide public understanding around the role of the organisation.

The International Centre for Infrastructure Futures, proposes that an Infrastructure Commission should be:

- inspirational and raise awareness of the importance of infrastructure;
- systemic and encourage broad cross-sectoral thinking;
- purposeful and identify the societal level outcomes that infrastructure will enable;
- future facing;
- methodologically transparent;
- tasked with identifying solution neutral needs;
- engaged to provide a cross sectoral approach to translating need into solutions; and
- subject to regular review. <sup>36</sup>

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<sup>33</sup> Recycling Our Infrastructure for Future Generations (19 December 2017) Author: World Economic Forum in collaboration with Atkins Acuity

<sup>34</sup> Strategic Infrastructure Planning: International Best Practice - International Transport Forum Policy Papers, No. 29 Case Specific Policy Analysis (2017)

<sup>35</sup> The Armitt Review, An Independent Review of Long Term Infrastructure Planning Commissioned for Labour's Policy Review, September 2013

<sup>36</sup> Infrastructure Commission: what are the opportunities and how should it work? Opinion piece, Dr Tom Dolan, Research Associate and Centre Co-ordinator, International Centre for Infrastructure Futures (ICIF), 27 October 2015

Consultation Questions for MAP Infrastructure Panel

1. What should society in NI seek to achieve from infrastructure and why is it important?
2. How do you see infrastructure needs and demands changing over the long term?
3. What works and what doesn't work in the current system of infrastructure decision making and delivery?
4. Do you have any comments on how infrastructure decisions are currently made in Northern Ireland? Would you propose any potential reforms to the current decision making process? How could these reforms be best achieved?
5. The Ministerial Advisory Panel have been asked to develop a proposal that will identify the specific role and value of a Commission and how it might be established and might operate. The next set of questions will test the viability of an Infrastructure Commission in Northern Ireland. Would you support the establishment of an Infrastructure Commission in Northern Ireland?
6. What value would an Infrastructure Commission bring to Northern Ireland?
7. How might the Infrastructure Commission be established and operate? (Pick one or more options)
8. What scope do you believe the Infrastructure Commission could / should have?
9. What time period should an Infrastructure Commission focus on?
10. The Infrastructure Minister aims to deliver cleaner, greener, sustainable and inclusive infrastructure. How could an Infrastructure Commission support these objectives?
11. What specific role should a Commission play in NI?
12. What is the minimum project value (£m) that the Infrastructure Commission should be engaged at (if it is involved at project level)?
13. What stage of the infrastructure lifecycle should the Infrastructure Commission be involved in?
14. To what extent do you think that the Commission should be tasked to hold Government to account?
15. There is a lot of ongoing debate around procurement issues at the minute. Should the Infrastructure Commission engage on procurement issues?
16. If created, should an Infrastructure Commission be responsible to;
17. Which international Infrastructure Commission model do you think is most appropriate for Northern Ireland? Please provide your reasons for selection and deselection
18. Do you have any additional comments on how the Infrastructure Commissioners role should operate in regard to Stakeholder engagement and any recommendation or evidence of best practice on how this can be achieved?

## A response from RSPB Northern Ireland, September 2020

### Introduction

The Royal Society for the Protection of Birds (the RSPB) is the charity that takes action for wild birds and the environment. We are the largest wildlife conservation organisation in the country with over one million members. We own or manage 151,954 hectares of land for nature conservation on 213 reserves throughout the UK. We believe that sustainability should be at the heart of planning and decision-making. The RSPB's policy and advocacy work covers a wide range of issues including planning policy, climate change, energy, marine issues, water and agriculture.

RSPB NI welcomes the opportunity to comment on the Ministerial Advisory Panel on Infrastructure Call for Evidence.

### Commentary

#### Climate and Ecological Emergencies

The need to address the causes and effects of climate change and biodiversity loss has never been more urgent and there is a growing political consensus that we face a climate and ecological emergency that threatens biodiversity, ecosystem functionality, and human health and wellbeing.

Development, whether housing, industrial, or infrastructure, has historically been one of the causes of biodiversity loss as well as a source of increasing carbon emissions. This situation cannot continue if we are to successfully reverse the net loss of nature and avoid the worst impacts of climate change on the environment and people.

Climate Change is one of the most pressing challenges facing our society and will require a response from all sectors of government to mitigate and adapt to ensure the future resilience of Northern Ireland. In recent years, we have witnessed with increased frequency the significant impacts flooding and extreme weather events have on communities, infrastructure and businesses, and with ever rising repair costs, there is a clear need to take resilience and adaptation to climate change seriously.

#### Infrastructure Shift

The current global pandemic has heightened awareness of the longer-term climate and ecological crises, with a majority of the public already clear that they want the environment prioritised in our post-COVID-19 economic recovery<sup>37</sup>. This will require a shift in the way we plan, design and build major and large-scale infrastructure.

Infrastructure planning and development must shift towards an approach that has the environment and nature at its core - seeking to not only minimise the environmental damage done by continuing infrastructure development, but to maximise new infrastructure's contribution to repairing and

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<sup>37</sup> <https://www.ipsos.com/ipsos-mori/en-uk/two-thirds-britons-believe-climate-change-serious-coronavirus-and-majority-want-climate-prioritised>

restoring the natural environment, and to upgrade existing infrastructure to realise its potential to benefit the environment.

Infrastructure deployment must be done in a way that delivers overall benefits for nature and meets the UK's zero carbon commitments. That means that development must not just avoid damaging nature, but actively enhance it, helping restore wildlife and biodiversity to a nature-poor landscape.

## Net Zero

Future infrastructure supply and demand will require to take greater cognisance of the environment and climate change. Infrastructure needs to demonstrate how it is contributing to biodiversity net gain and UK net zero carbon targets by going beyond mitigating and compensating the impacts of development by enhancing natural capital, supporting the recovery of nature and meeting future environmental challenges. Done correctly, it should help to deliver sustainable development, restore nature, and create and enhance places where people live and work. Furthermore, public and private finance should meet a 'net zero test' and prioritise investment in low carbon infrastructure. In protecting natural capital, the significance of infrastructure impacts on biodiversity at the strategic level must not be underplayed. Biodiversity must be properly taken into account in infrastructure planning and natural capital approaches. If there is failure to invest in infrastructure which is fit for the future, we will not be able to mitigate and adapt to climate change and we will lose yet more of our exceptional biodiversity and the ecosystem services that it provides.

## An Integrated, Longer Term and Whole-Life Approach to Infrastructure

An effective integrated approach to infrastructure planning is required, looking across the different categories of infrastructure (e.g. land use planning, marine spatial planning, health, transport, environmental policy) to fully realise the benefits of long term infrastructure planning within environmental limits, thereby enabling Northern Ireland to meet climate change targets whilst protecting, enhancing and restoring our exceptional natural environment.

Such an approach could include a national spatial plan for infrastructure which would help to ensure that infrastructure is properly located, minimises conflicts with wildlife and maximises opportunities for biodiversity enhancement. At the sub-national level, strategic spatial planning is critical for delivering connected, liveable towns and cities, delivering new homes in the right places and well-sited energy infrastructure, while also enhancing natural capital. A high-quality natural environment which includes multi-functional green infrastructure is also fundamental to liveable towns and cities (see comments below on Blue and Green Infrastructure for further details).

The long-term risks from climate change necessitate a longer-term approach to whole life infrastructure planning and investment. In addition to changes required in the approaches to identify supply and demand in the context of the climate and ecological emergencies, a longer term assessment will require consideration of the decommissioning phase of redundant infrastructure. This can benefit the natural environment through minimising any future potential *in situ* pollution risks, and 'releasing' land back to the benefit of nature and human health and wellbeing.

An integrated approach to infrastructure will allow a focus on the role of nature-based solutions, which are key in tackling the nature and climate emergency. See also the Transport section below for further commentary on infrastructure integration.

State of Nature 2016 identifies urbanisation (which includes infrastructure development), as one of the top ten drivers of biodiversity change in the UK since 1970, with a largely negative impact <sup>38</sup>. After agricultural and climate change, hydrological change and urbanisation are the next most important drivers of species decline <sup>39</sup>.

Investment in Northern Ireland's natural environment has an important role to play in our economic recovery from COVID-19, as a core component of the Green Growth strategy being developed by the Department for Agriculture, Environment and Rural Affairs, the 'Rebuilding the Economy' framework being developed by the Department for the Economy, the Green New Deal planned in the New Decade, New Approach agreement and the NI Investment Strategy.

The most high-profile scientific journal, *Nature* has called for governments to 'include the true value of nature when rebuilding economies after corona virus' <sup>40</sup>. The UK Natural Capital Committee, a statutory advisor to the UK government on natural capital policy also recognises the superior cost-benefit ratio of nature based fiscal stimulus measures:

*'Nature based interventions can deliver carbon reductions at a fraction of the cost of engineered solutions...Public spending projects that consider natural capital offer large benefit-cost ratios, in many cases larger than the benefit-cost ratios of traditional built capital investments, such as rail and road projects. In some cases, natural solutions can represent a more cost-effective alternative way of providing what would otherwise be provided by built capital, while at the same time providing additional benefits.'*

In addition to this, the inclusion of natural capital and nature-based solutions within the infrastructure solutions mix could facilitate a greater role for the 'principles of preventative spend' by reducing public expenditure in other government departments. The following projects delivered by RSPB NI in partnership with a Health Trust and the Public Health Agency in Case Study 1; and, in Case Study 2 with Northern Ireland Water and the Northern Ireland Environment Agency illustrate this effectively:

### Case Study 1

Savings can be accrued by improving mental health and wellbeing through facilitating increased access to green/blue infrastructure and nature. In this regard, a 12-week pilot project called 'Head to Nature' organised by RSPB NI in partnership with Derriagh Social and Educational Centre of the South-Eastern Health Trust and the Public Health Agency, saw eight service users voluntarily attend Portmore Lough nature reserve near Aghalee to carry out nature related activities like guided walks, wildlife photography and practical conservation work on the reserve. The participants all suffered from mild mental health problems like depression and anxiety.

Participants in the project were asked to fill out questionnaires at the beginning and end of the scheme and their answers were marked against the Warwick Edinburgh Mental Wellbeing Scale. The mean

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<sup>38</sup> Hayhow DD, Burns F, Eaton MA et al. (2016) [State of Nature 2016](#). The State of Nature Partnership.

<sup>39</sup> Burns F, Eaton MA, Barlow KE, Beckmann BC, Brereton T, Brooks DR, et al. (2016) Agricultural management and climatic change are the major drivers of biodiversity change in the UK. PLoS ONE 11(3): e0151595. <https://doi.org/10.1371/journal.pone.0151595>

<sup>40</sup> [https://www.nature.com/articles/d41586-020-01390-w?WT.ec\\_id=NATURE-20200514&sap-outbound-id=5DE9C676E07F617BF89CF93E26F5999808762002](https://www.nature.com/articles/d41586-020-01390-w?WT.ec_id=NATURE-20200514&sap-outbound-id=5DE9C676E07F617BF89CF93E26F5999808762002)

score in week one was 36.25 – classed as ‘below average’ wellbeing. But by week 12 the mean score had risen to 49.37 which is classed as ‘average’ wellbeing, showing that the Head to Nature scheme had a positive impact on the participants’ wellbeing. The pilot saw 100% participant retention rate throughout the project. In comparison, only around one in eight people referred to gym programmes for similar mild mental health problems by their GP complete the course.

Some of the substantial mental health challenges facing society (Foresight 2008; HSE 2008), and physical challenges arising from modern diets and sedentary lifestyles (Wanless 2002; Wanless 2004; DH 2005a; Sport England 2006; Wells et al. 2007; NICE 2008; DH & DCSF 2009; NICE 2009), could be addressed by increasing physical activity in green settings. If children are encouraged and enabled to undertake more green exercise, then they are more likely to have active exposure to nature embedded in their lifestyle as adults and they will reap the associated health benefits’ Paragraph 23.8, page 1173).

## Case Study 2

Another example of cost savings/preventative spend is in our uplands. 80% of our blanket bogs have been overexploited by the commercial extraction of peat, (particularly for horticulture), and have been severely damaged by drainage, overgrazing, and inappropriate management. This has knock-on effects for our water quality, resulting in high levels of dissolved “brown water” carbon, which costs money and energy to treat.

RSPB NI joined Northern Ireland Water and the Northern Ireland Environment Agency to produce a management plan for almost 2,000 hectares of blanket bog that forms the catchment around the Dungonnell Reservoir, on the Garron Plateau. Despite its designation as an Area of Special Scientific Interest, overgrazing has left the Dungonnell site in a poor state. By reducing grazing in the area, we will allow the blanket bog to recover, increasing the amount of carbon it can store, in turn improving water quality, reducing water treatment costs and securing high-quality habitat for rare and threatened wildlife.

For further details please see web links below:

<http://ww2.rspb.org.uk/our-work/rspb-news/news/361922-giving-nature-a-home-at-garron>

<http://ww2.rspb.org.uk/our-work/rspb-news/news/340365-peak-district>

## Environmental Economist

The NI Executive should include the expertise of an environmental economist to develop a Northern Ireland Natural Capital Investment Plan as a core component of future government policy. By integrating Natural Capital into our decision making we can make more informed decisions that better reflect the values of nature when taking investment decisions to help rebuild our economy. Carbon accounting needs to be fully taken into account in projects, with the Department ensuring that public and private finance meets a ‘net zero test’.

RSPB NI recognises the crucial role that green and blue infrastructure can play in supporting healthy communities, supporting wildlife and mitigating the effects and causes of climate change.

In this regard, green and blue infrastructure will have a crucial role in delivering sustainable solutions for Northern Ireland including for example, sustainable tourism and recreation; active travel; and flood alleviation and sustainable drainage. Green infrastructure can convey flood water through residential areas so that it causes least damage, reconnect floodplains to hold flood water away from cities and towns and be used as engineered wash lands to reduce the peak of dangerously high river flows. In this regard, green infrastructure has a positive role in both reducing flood risk, and dealing with extreme events. A natural capital account for Derry City and Strabane Council demonstrated that green and blue spaces provide £75million worth of benefits to residents every year, with every £1 invested providing £22 of public benefit <sup>41</sup>. Meanwhile, an options appraisal <sup>42</sup> published by Vivid Economic estimates that a £5.5bn capital investment in a green infrastructure programme across England, Scotland and Wales to upgrade existing parks and greenspaces, greening urban neighbourhoods and creating new parks could deliver £200bn in physical health and wellbeing benefits.

## Transport

The transportation of people and goods has a crucial role to play in fostering economic prosperity and social integration. However, it also accounts for 21% of the total greenhouse gas emissions for the UK, with cars alone accounting for 12%. In this context, local authorities' Local Development Plans (LDPs) can make a significant contribution to reducing these emissions through decision-making on the location, scale, mix and character of development. The integration of transportation with LDPs spatial growth strategy, which if conducted correctly, could potentially make a significant contribution to securing sustainable transport and active travel within local authority council areas. Further detailed planning policies could ensure that measures to accommodate active travel are adequately incorporated into new building design e.g. cycle parking and storage, and maintained shower facilities at place of work etc. The need to travel should be reduced. The principle way of avoiding the environmental impacts associated with transport is to reduce the need to travel and to minimise demand.

A greater use should be made of information technology to minimise demand for travel. The last six months following the COVID-19 lockdown have demonstrated that this is possible with people increasingly working from home, holding virtual meetings and online ordering.

There should also be a greater shift towards the use of sustainable modes of transport (walking, cycling, buses and rail). Even with measures in place to minimise the demand to travel, it will still be necessary to make some journeys. In this case, as many journeys as possible should be made using sustainable modes of transport. Government should ensure there is adequate investment in these modes to provide a suitable alternative to private car travel.

There should be a move towards the use of low carbon vehicles and fuels, including a more rapid deployment of electric vehicles and supporting charging infrastructure. Biofuels can pose significant sustainability risks and a cautious approach is needed to their role. Improved vehicle efficiency is a more sustainable approach. Vehicle and engine manufacturers should invest further in research and

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<sup>41</sup>[https://d1ssu070pg2v9i.cloudfront.net/pex/carnegie\\_uk\\_trust/2020/02/25084102/NCA-Final-Report-CUKT.pdf](https://d1ssu070pg2v9i.cloudfront.net/pex/carnegie_uk_trust/2020/02/25084102/NCA-Final-Report-CUKT.pdf)

<sup>42</sup><https://www.vivideconomics.com/wp-content/uploads/2020/07/Greenkeeper-Report-for-FPA-Greening-Programme-July-2020.pdf>

development programmes aimed at reducing emissions. The Government should encourage vehicle manufacturers and operators to develop and fit new technology.

#### RSPB Principles for major and large-scale infrastructure

The following principles set out the high-level approach to planning major and large-scale infrastructure that is required in order to meet society's needs in the face of the abovementioned urgent environmental challenges.

1. Decisions on major and large-scale infrastructure projects (henceforth known as infrastructure) should be based on a clear National Spatial Plan and vision which considers all types of infrastructure and major development in a coherent way, providing certainty for the long term – this needs to be developed as a matter of urgency. This will, in turn, provide an effective framework for spatial planning at the local level and help integrate other public objectives, such as nature's recovery.

2. Infrastructure proposals should be subject to early and effective democratic scrutiny through public participation and consultation at both local and national levels. This is essential to ensure transparency. Those adversely affected by decisions on infrastructure should have a fair opportunity to challenge it.

3. Infrastructure projects and the plans underpinning these should be based on up-to date and scientifically robust evidence, including evidence on the value of the natural environment. Plans should be monitored and reviewed regularly.

4. Infrastructure projects and the plans underpinning these should be rigorously assessed for their environmental impacts and the results used to improve the plan to ensure that plans do not exceed environmental limits and tolerances. This includes, but is not limited to, Strategic Environmental Assessment, Habitats Regulations Assessment and Environmental Impact Assessment.

5. Alternative options must be considered, particularly alternatives that are less damaging to the environment and the reasons for rejecting any options should be made public.

6. Infrastructure proposals should not lead to any regression of existing standards and requirements including those relating to environmental assessment and statutory protected sites. Proposals must also be compatible with new environmental commitments and requirements emerging as we exit the European Union.

7. New infrastructure projects must achieve no net loss of biodiversity through rigorous application of the mitigation hierarchy. Once no net loss has been demonstrated, projects should then look to deliver significant net gain for biodiversity with a minimum of 10% (but best practice being significantly higher).

8. All new major and large-scale infrastructure projects must be compatible with (and ideally further) the UK's net zero target. The RSPB is calling for a UK target of net zero sooner, by 2045, and for this to be enshrined in law.

9. Public authorities must have the legal powers and resources to enforce planning laws, especially where illegal development is resulting in environmental damage.

#### Infrastructure Commission in Northern Ireland

An Infrastructure Commission in Northern Ireland should:

- Ensure effective integration with the land-use planning system and all other infrastructure sectors;
- Endure openness and transparency with full opportunities for public and stakeholder consultation, scrutiny and challenge to ensure climate change and biodiversity interests and issues are fully taken into account given the climate and ecological emergencies faced;
- Ensure a broader remit than exists within the National Infrastructure Commission in England, and commensurate with biodiversity and climate change crises faced;
- Take impact of whole life costs, benefits and implications of major infrastructure on diversity and climate change fully into account;
- Have an advisory and consultative remit with responsibility for decision making clearly lying within a democratically accountable structure;
- Have a 30-40 year planning horizon with 5 yearly reviews, which are transparent and open to consultation and challenge;
- Reflect the significant changes in technology and lifestyles that will occur over the coming years in the strategic planning of major infrastructure investments.
- Have a remit to ensure and support a green recovery that is sustainable in the long term. This may require a very different focus and approach to that adopted by other infrastructure commissions to date. A continuation of business as usual in terms of major and hard infrastructure delivery is only going to further compound long term costs and damage to the environment, economy and society. A new model, which has nature-based solutions at its heart, is required for new times, that prioritises, invests and builds back better.

#### Procurement

There is a need for a sustainable procurement duty that requires consideration of social and environmental well-being in the procurement process focusing on delivery of long-term sustainable procurement. It should also include measures on resource efficiency, encouraging a reduction in the need for procurement through demand reduction, energy efficiency and reduction of waste for contracting authorities. Sustainable procurement has the potential to create long-term positive environmental, social and economic cycles within Northern Ireland by utilising the Northern Ireland annual government expenditure to positively influence markets, supply chains and decision-making in wider society, and can instigate far-reaching positive effects on land use, wildlife habitats, biodiversity, energy and food security, health and wellbeing.

#### **For further information contact:**

Michelle Hill MRTPI , Head of Nature Policy and Casework, RSPB Northern Ireland

## A response from The Centre for Competitiveness, September 2020

### Ministerial Advisory Panel on Infrastructure delivering cleaner, greener, sustainable and inclusive infrastructure.

Two of the fundamental infrastructure building blocks in a progressive economy is an adequate supply of both energy and water. With regards to water supply you either bring the water to the people or the people go to the water as is evident in underdeveloped nations. These two primary infrastructure essentials underpin most other infrastructure developments in a modern and progressive economy, be it transport, housing, sewerage, telecommunications or healthcare etc.

As the saying goes: “a system is more than the sum of its parts” so a coordinated approach to all infrastructure can only result in building a stronger eco infrastructure system incorporating energy with transport, cycling and the other infrastructures with both gas and electricity carriers’. Combining our efforts will enable better efficiency and reliability, to facilitate the meeting of those commitments and address the post COVID-19 recovery plan meeting national net-zero carbon reduction targets underpinning a sound and complete infrastructure design.

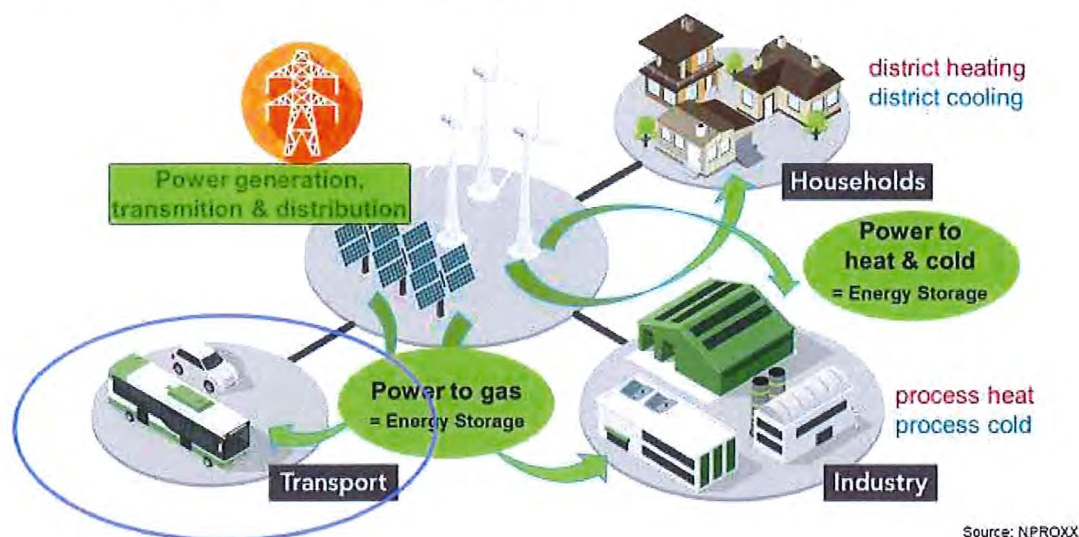
The key issue for the Infrastructure Advisory panel is whether energy is included within the scope of any proposed Infrastructure Commission. Because energy is under the Economy Minister rather than the Infrastructure Minister, there is a real risk that Minister Mallon will establish a Commission that deals with infrastructure within her scope only (transport, water etc.), and exclude energy. That would leave a major gap from our perspective.

The emphasis on the Smart Grid Ireland submission is on sector coupling in terms of looking across electricity and gas as important within infrastructure design and development. We think it is also important to emphasise the need to look for coupling across energy within the developments in transport, and water and telecoms etc. For example, in a zero-carbon world, you can't really look at transport infrastructure without considering energy infrastructure, and vice versa!

In the model shown in this paper, I would suggest that the panel give more emphasis to the linkage with Transport and indeed with Housing that is shown on the graphic. As the debate further develops on how gas and electricity systems in particular can help to meet the infrastructure needs associated with the 2030 and 2050 climate and energy targets both operators recognise the changing landscape and consequently, the changing infrastructure needs for transporting increasing volumes of renewable, decarbonised and low-carbon gases, such as hydrogen and biomethane.

Smart Grid Ireland are currently carrying out feasibility testing on sector coupling infrastructure with an international European corporation covering electro-thermal-energy-storage systems for district heating, cooling, storage and generating electricity within both transport, district heating and healthcare. (Example).

## Sector Coupling – The players and stakeholders



*Sector coupling involves the increased integration of energy end-use and supply sectors with one another to foster the full potential of sector coupling in several end uses and supply applications, it is important that existing techno-economic, policy and regulatory barriers are removed. (Source: European Parliament – Europa)*

One of the recommendations to the panel is to address the opportunity for sector coupling – that is, to allow for flexibility, storage options, cross-border transportation capacities and security of supply in a faster and more efficient way, whilst also meeting decarbonisation targets in infrastructure design and development. This is an important first important step to identify and assess the interlinkages and interactions between the gas and electricity systems and the other infrastructures within the Advisory Panel's remit. For a cost-efficient decarbonisation, a coordinated and coherent interaction between electricity and gases and other infrastructure developments is essential

Due to the intermittency of renewable energy, the power sector will need decarbonised gases to ensure security of supply and to reach climate neutrality. Power to Gas for example in Transportation, enables renewable energy supply in the form of hydrogen to be transported via gas grids to sectors difficult to electrify. This technology can help to alleviate local/regional congestion in electricity infrastructure, avoiding the curtailment of non-dispatchable renewable electricity.

It would thus contribute to solving challenges in relation to balancing the power grid – for storage and flexibility and maintain supply to transport and water infrastructures. The challenge today is not that the individual technologies are not proven and ready, but that they need to be massively scaled-up in order to offer cost-effective climate benefits across the different developments.

SGI believe it is possible to realise the synergies between infrastructure development and the existing gas and electricity infrastructures in evolving technologies

Innovation, integration and efficiency are key to meeting energy consumers' needs, in water and transport whilst also achieving decarbonisation goals. We recommend that the infrastructure panel particularly focus on the role that gas and electricity infrastructure will play as part of an Energy System Integration strategy, whilst also highlighting the societal cost savings and environmental and infrastructure benefits of a hybrid energy system that uses electricity and gas.

A hybrid energy system of both electricity and gas connected to transport, water supply, housing with energy carriers / infrastructure is a backbone which can result in increased flexibility, storage and security of supply. We propose policy measures as inputs to the review panel that can accelerate the deployment of biomethane and hydrogen alongside renewable electricity in infrastructure planning and development.

The first important step is to identify and assess the interlinkages and interactions between the gas and electricity systems and other infrastructures is paramount in order to deliver the best infrastructure assessment enabled by a hybrid energy supply.

It would also be useful to present to consumers, industry and institutions relevant studies, case-studies and examples of innovative infrastructure developments with gas and electricity projects connected that showcase smart sector integration, as well as examples of the interlinkages and synergies between TSOs and DSOs.

Now is the time to foster the deployment of innovative technologies in infrastructure developments in Transport, water, sewerage etc along with smart grids, hydrogen networks or carbon capture, storage and utilisation, energy storage, also enabling sector integration.

Bob Barbour – Smart Grid Ireland.

*Source Material: Energy System Integration Europe.*

*The Centre for Competitiveness is Secretariat for Smart Grid Ireland - an all island industry cluster of energy companies.*

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## A response from Belfast City Council

### Q1. What should society in NI seek to achieve from infrastructure and why is it important?

Well governed, planned, resourced and sustainable infrastructure is a driver and enabler for national and regional policy, and for delivery at a city level. Regional policy (the Regional Development Strategy 2035) recognises the importance of infrastructure to support sustainable growth and this is reflected at a local level in Belfast. The Belfast Agenda highlights the importance of appropriate sustainable development to make the city competitive and to connect people to opportunities. Fundamental to creating the conditions for and enabling this inclusive growth, is infrastructure. The Belfast Resilience Strategy identifies the central importance of infrastructure to the city's economic and climate resilience and includes a number of recommendations for reform- in particular the importance of integration of infrastructure, and of systems efficiency. The strategy was developed following detailed analysis of what works in similar cities. A key learning from this analysis is the importance of good infrastructure in attracting capital to ensure sustainable funding models over the short and long term.

The Belfast Agenda also recognises that there are gaps in Belfast's key infrastructure which must be addressed if the city is to grow. The Agenda identifies that infrastructure planning and investment for Belfast needs to be taken forward in a strategic and integrated way and a core goal of the Agenda is to create a partnership and plan for sustainable urban infrastructure.

The infrastructure investment should be targeted to release the greatest economic potential and support inclusive economic development that provides the opportunity to sustainably increase GVA, and the ability of the region to compete internationally.

This should take into account the global trend for the role of cities within society, both in terms of population growth enabling more sustainable and efficient infrastructure provision, and in the growing role of cities in terms of economic growth. Successful regions have strong and vibrant cities at their core. Belfast drives much of the economic growth and shares its wealth across the Region and as such the role of the future city needs and requirements in terms of residential, economic, health and well-being and place-making should be at the heart of the infrastructure provision.

Furthermore, given the potential impacts of climate change to the city of Belfast (see visual representation of sea-level rises using land elevation data), the ability of NI society to build its resilience to climate change must be a key objective of infrastructure in the coming years. Furthermore, the UK's legal commitment to net zero emissions by 2050 will also be a key driver for how we build infrastructure, and the infrastructure classes which are prioritised for investment. The findings of the 'Mini Stern' for Belfast have identified the step changes required in this decade to ensure achievement of the 2050 objective. All major infrastructure projects must act as levers towards net zero emissions from this point onwards, given the legal requirement to arrive at net zero emissions by 2050.

## Q2. How do you see infrastructure needs and demands changing over the long term?

Globally, there are several recognised key drivers and emerging trends which influence infrastructure needs and shape methods of infrastructure delivery both now and in the future. It is assumed that many of these will also relate to Northern Ireland in some form. These key drivers and emerging trends include:

- Population, housing and employment growth
- Changing working and shopping / spending patterns
- Changing demographics – aging population - increasing demand for homes + smaller household sizes
- Urban densification and regeneration – desire for city centre living
- A changing climate and decarbonisation
- Impact of extreme weather events, of changing temperatures, warmer summers and wetter winters, sea level rises and impacts of climate change on biodiversity
- Increasing recognition of the value of the environment to the economy and social well-being
- Importance of improving air quality Increasing efficiencies of infrastructure Behavioural change
- Increasing digitalisation
- New technologies, artificial intelligence and automation
- Increasing use of smart technologies and environments – disruptive technologies
- Growth in Ultra-low emissions vehicles- public transport, private transport and freight –impacts on the grid and step change in demand for renewables in this decade
- Reduction in Greenhouse Gas Emissions
- Brexit
- Covid-19

## Q3. What works and what doesn't work in the current system of infrastructure decision making and delivery?

The majority of Northern Ireland infrastructure has suffered from long-term under-investment resulting in the need for significant investment in key infrastructure provision including waste water, rail, and sustainable and active travel. There is a need for a longer-term regional prioritised infrastructure strategy and updated integrated localised strategic plans such as Belfast Metropolitan Transport Plan and Living With Water Programme. These strategic documents should provide a holistic and prioritised approach to the delivery of NI infrastructure and be considered in the context of a realistic funding model to achieve the level of infrastructure required to enable the region to continue to grow and to compete effectively.

The strategies should also provide for infrastructure delivery based on a place-making approach, taking into account local and regional social and economic developments, and enabling and encouraging innovation and new solutions to complex infrastructure issues.

There needs to be an approach that ensures or helps support a process where infrastructure investment decisions can be made, and to ensure delivery on a long-term basis that sits beyond the standard political decision making timescales.

Work is required to learn from other jurisdictions regarding funding models to ensure sustainable approaches to funding infrastructure over the long term. Optimum models will be required to ensure Northern Ireland's infrastructure can attract capital to work alongside public funding and ensure value for money and excellent services for the public.

Furthermore, infrastructure in Northern Ireland has traditionally been designed and delivered in silos - decarbonisation of our economy, and a range of other factors have driven greater systems integration, and this must become the hallmark of our delivery models in the future. Belfast City Council, through its Resilience and Sustainability Board is taking forward a number of partnerships which integrate different forms of infrastructure- e.g. the V-PACH project to develop EV infrastructure in the city, bringing together transport and energy infrastructure; working with partners to explore potential opportunities for retrofit of housing stock through partnerships with energy industry; opportunities for green hydrogen which over the long term also provide potential to improve wastewater treatment capacity. This builds on the work taken forward by Belfast City Council several years ago took part in an Innovate- UK funded 'Future City Demonstrator project', which identified opportunities for integrating infrastructure. BCC Resilience Commissioner is a member of the World Economic Forum Executive Working Group on Systems Efficiency- working with global partners to explore opportunities to integrate buildings and energy infrastructure and extract greater value and efficiency in the public interest.

#### **Q4. Do you have any comments on how infrastructure decisions are currently made in Northern Ireland? Would you propose any potential reforms to the current decision making process? How could these reforms be best achieved?**

Infrastructure decision should be made in line with a prioritised and agreed delivery strategy that takes into account social and economic change, demands and the longer term return from the investment in terms of growth and sustainability. While political oversight is required, expert independent advice and guidance can help ensure that the infrastructure prioritisation is undertaken based on delivering the sustainable infrastructure requirements of the region as a whole, encouraging sustainable development and promoting the region to grow and to compete effectively.

An approach to longer term strategy development and associated Infrastructure Plans that are subject to regular review and monitoring in relation to the longer term aspirations and outcomes on which they are based.

Local authorities, in particular within the capital city, are critical convenors and enablers for ensuring strong and effective partnerships to design and deliver sustainable infrastructure. However, this informal role should be strengthened, so that they can plan the provision of infrastructure to ensure sustainable growth within the city, and to ensure that the cross-cutting infrastructure provision is adequate for the future social, environmental and economic needs of the city. The local authority should form an integral part of the Infrastructure Commission to ensure alignment, and the successful delivery of the growth plans of the region's economic driver.

Furthermore infrastructure is a critical Executive Priority, and several infrastructure classes (e.g. energy and housing) sit within the responsibility of other departments. To take a genuinely holistic and integrated approach to infrastructure, as is the norm in many other jurisdictions, the development of infrastructure must be understood as an Executive priority.

**Q5. The Ministerial Advisory Panel have been asked to develop a proposal that will identify the specific role and value of a Commission and how it might be established and might operate. The next set of questions will test the viability of an Infrastructure Commission in Northern Ireland. Would you support the establishment of an Infrastructure Commission in Northern Ireland?**

Yes. An independent, expert-led Infrastructure Commission that is transparent and accountable, focusing on strategic prioritisation and delivery could bring value. The Commission should define infrastructure broadly, and should seek to integrate the operation of various infrastructure classes, working together to meet government objectives. If the focus is clearly on developing a strategy which will incorporate an infrastructure plan with associated delivery in the form of projects and priorities to improve both the quality and impact of infrastructure development. As suggested in the circulated research it needs to move beyond the consideration or management of individual risks or assets (beyond just DfI aspects), to the systems as a whole. Its advice role should be set out in detail, e.g. like the Committee on Climate Change in the UK, it should be required to produce regular reports to the NI Executive and NI Assembly on the design and operation of infrastructure across NI and the extent to which it meets existing government policy and it should be required to comment on future resiliency.

**Q6. What value would an Infrastructure Commission bring to Northern Ireland?**

An independent, expert-led Infrastructure Commission could add value by;

- Offering independent expert advice to government
- Take a coherent and integrated approach to reviewing the operation of NI's infrastructure
- providing a challenge role in the reviewing of proposed infrastructure projects
- Helping to prioritise and develop Infrastructure Plans with the ongoing monitoring of delivery
- Helping to prioritise infrastructure projects
- Conducting expert reviews of ongoing projects to keep them on track
- Increasing accountability and transparency
- Provide advice on the resiliency of infrastructure- the extent to which it is fit for the future

**Q7. How might the Infrastructure Commission be established and operate? (Pick one or more options)**

Independent, focussing on Prioritisation and Strategy

Q7. How might the Infrastructure Commission be established and operate? (Pick one or more options)

Independent, focussing on Prioritisation and Strategy

Independent organisation, facilitating public debate

Government led

Independent organisation, focusing on individual projects or programmes

**Q8. What scope do you believe the Infrastructure Commission could / should have?**

- Hard infrastructure (water & waste, drainage and inland waterways, public transport, roads and cycling infrastructure)

- Digital and communications Infrastructure
- Energy Infrastructure
- Housing Infrastructure

Q8. What scope do you believe the Infrastructure Commission could / should have? (pick one or more options)

Hard infrastructure (water & waste, drainage and inland waterways, public transport, roads and cycling infrastructure)

Digital infrastructure

Energy infrastructure

Housing infrastructure

Education and Health infrastructure

## Q9. What time period should an Infrastructure Commission focus on?

20-30 years linked to regional strategies

Q9. What time period should an Infrastructure Commission focus on?

Less than 20 years

20 - 30 years

30 - 40 years

40 - 50 years

More than 50 years

## Q10. The Infrastructure Minister aims to deliver cleaner, greener, sustainable and inclusive infrastructure. How could an Infrastructure Commission support these objectives?

The infrastructure Commission must ensure that NI's infrastructure is driving progress towards the 2050 net zero carbon target, as required under legislation. Furthermore, it should seek to ensure achievement of UN Sustainable Development Goals, as other countries infrastructure commissioners are doing. It should seek to ensure climate resilience is a core design requirement for all future infrastructure, and that it contributes to the wider resilience of NI society.

An Infrastructure Commission can provide benefit through independent oversight and guidance of emerging plans and delivery projects to ensure the maximum benefit in delivering green, sustainable and inclusive infrastructure. The panel should also be suitably qualified to provide the expertise in best practice and learning from international infrastructure delivery and city growth.

The approach for the Commission should not be about seeking to provide for all the future infrastructure needs upfront, it should develop the capacity or processes for identifying and planning the trigger points or indicators that will point towards new or upgraded infrastructure requirements at the appropriate times,

ensuring that the infrastructure can be operational when they are reached alongside the collaboration needed to achieve such an integrated model.

The Commission should take into account the role of the local authority to influence, lead and deliver cross-cutting infrastructure requirements based on community planning, and enabling enhanced greener, sustainable and inclusive infrastructure. Global cities are taking on a greater role in leading economic and place making provision, and collaborative working such as the Bolder Vision for Belfast has shown how local authorities in NI can lead and influence the direction of travel for the city residents and users across economic, social and sustainable provision.

### Q11. What specific role should a Commission play in NI?

An Infrastructure commission in NI can provide a statutory advice role, an oversight and challenge role, and provide strategic advice and knowledge on the development and delivery of infrastructure policy and projects in NI to ensure effective, sustainable and efficient delivery of the infrastructure requirements.

As noted above there needs to be an approach that ensures or helps support a process where infrastructure investment decisions can be made and ensure delivery on a long-term basis that sits beyond the standard political decision-making timescales.

### Q12. What is the minimum project value (£m) that the Infrastructure Commission should be engaged at (if it is involved at project level)?

£30m

Q12

What is the minimum project value (£m) that the Infrastructure Commission should be engaged at (if it is involved at project level)?



### Q13. What stage of the infrastructure lifecycle should the Infrastructure Commission be involved in?

The infrastructure commission should be involved in the early process of strategic planning and the prioritisation of strategic project delivery. The commission should also have a challenge/ oversight role in the delivery of infrastructure projects to ensure adherence to, and delivery of green, sustainable and inclusive infrastructure in the delivery of the longer-term aspirations and outcomes.

### Q14. To what extent do you think that the Commission should be tasked to hold Government to account?

As an independent body the Commission should have the authority to challenge and to provide advice on infrastructure delivery and prioritisation. The commission should through the strategy development be able to provide recommendations to the infrastructure delivery bodies, and to the NI Executive / Committee for Infrastructure.

### Q15. There is a lot of ongoing debate around procurement issues at the minute. Should the Infrastructure Commission engage on procurement issues?

Yes, including providing advice and experience on funding options and routes to procurement.

## Q16. If created, should an Infrastructure Commission be responsible to;

NI Executive – accountable directly to the Infrastructure Minister or Finance Minister

## Q17. Which international Infrastructure Commission model do you think is most appropriate for Northern Ireland? Please provide your reasons for selection and deselection. Please note that a summary of each of these models is contained within Appendix G.

The Independent Strategy & Prioritisation Organisation model would be the most appropriate fit for NI. The models provided for Australia and the internal states provide for a remit for the setting the policy agenda on long-term opportunities for infrastructure and evaluating business cases for nationally significant investment proposals. The 'place based' approach on infrastructure planning, providing advice to government, industry and communities allows for a wider approach to infrastructure delivery, taking into account wider societal and economic considerations rather than the typical siloed or political led infrastructure decision making process. The long term 30yr infrastructure strategy of Infrastructure Victoria with a 5yr Infrastructure Plan Projects Pipeline allows for long term prioritised planning with a focused approach on short-medium term delivery.

It should also be noted that, in regard to cities in particular, the role of the local authority in Northern Ireland differs from much of the rest of the United Kingdom and the majority of the examples provided. The role of the local authority within growing cities that have a significant economic role within the region should be considered in terms of their expertise and experience in developing the city infrastructure requirements. Opportunities should be provided for cities to influence and deliver infrastructure that directly aligns with the cities growth agenda and economic targets, while ensuring that infrastructure provision is not siloed, but takes into account community and place making focused infrastructure to provide places to work, live, visit and enjoy.

## Q18. Do you have any additional comments on how the Infrastructure Commissioners role should operate in regard to Stakeholder engagement and any recommendation or evidence of best practice on how this can be achieved?

In its approach to stakeholder engagement, an Infrastructure Commission should acknowledge the importance of focused consultation within key infrastructure sectors, but also the need for cross-sectoral engagement that recognises the relationships (direct and indirect) between different sectors, and the value of interagency working in understanding issues and their impact, and in identifying synergies that can drive efficiency in the delivery of sustainable infrastructure solutions.

Stakeholder engagement by a Commission should reflect the far-reaching impacts of infrastructure decisions and enable integrated consultation, and decision making, that directly links city priorities such as connectivity and climate change, which have direct relevance to the city's infrastructure. When considering stakeholder engagement the commission should take into account the importance of the role of local communities when considering infrastructure provision, ensuring that communities are adequately represented, informed and enabled to take part in the formation of infrastructure planning, design and decision making.

The Belfast Agenda is the first interagency plan for the city, and identifies that infrastructure planning for Belfast needs to be taken forward in a strategic and integrated way, with a core goal of the Agenda being to create a partnership and plan for sustainable urban infrastructure. An interagency approach to infrastructure that identifies cross-cutting themes and complementary interventions should aim to support sustainable and inclusive growth to 2035 as outlined in the Belfast Agenda and the Belfast Inclusive Growth Strategy.

The Local Development Plan 'Draft Plan Strategy' also recognises that cross-sectoral infrastructure planning is integral to the day to day operation and socio-economic sustainability of the city, which should be reflected in the approach to engagement and consultation.

The role of a future Infrastructure Commission should include consideration of factors which fall outside the immediate remit of the Department for Infrastructure, and timely stakeholder engagement across sectors including for example, social infrastructure, and green and blue infrastructure will be necessary.

The 'Infrastructure Commission for Scotland- Appendix G' refers to the National Infrastructure Commission (NIC) as working across the infrastructure system to 'counteract siloed working', and notes the value of consultation around individual projects, and the broader infrastructure strategy or plan within which they sit.

In this context, a Commission for Northern Ireland should explore stakeholder engagement options relating to independent long-term advice, including organisations which work with, but sit independent of or outside of, government and are either instrumental in the delivery of independent and long-term advice or provide a vehicle for comprehensive public engagement.

This response has been approved by the City Growth and Regeneration Committee at Belfast City Council.

## A response from Belfast City Council's Innovation Commissioner

### Q1. What should society in NI seek to achieve from infrastructure and why is it important?

Well governed, planned, resourced and sustainable infrastructure is a driver and enabler for national and regional policy, and for delivery at a city level. Regional policy (the Regional Development Strategy 2035) recognises the importance of infrastructure to support sustainable growth and this is reflected at a local level in Belfast. Belfast's Community Plan and City Strategy, The Belfast Agenda, sets out ambitious aspirations for growing the city's economy, growing the city's population, and an inclusive approach to connecting people to opportunities, to address social and economic inequalities. It highlights the importance of appropriate sustainable development to make the city competitive and to connect people to opportunities. Fundamental to creating the conditions for and enabling this inclusive growth, is infrastructure.

The Belfast Agenda also recognises that there are gaps in Belfast's key infrastructure which must be addressed if the city is to grow. The Agenda identifies that infrastructure planning and investment for Belfast needs to be taken forward in a strategic and integrated way and a core goal of the Agenda is to create a partnership and plan for sustainable urban infrastructure.

The spatial and physical aspects of the Belfast Agenda will be realised through the Belfast Local Development Plan which will:

- provide a 15-year plan framework to support economic and social needs in the city
- facilitate growth by coordinating public and private investment to encourage development where it can be of most benefit to the wellbeing of the community
- allocate sufficient land to meet the needs of the city
- provide an opportunity for all stakeholders, including the public, to have a say about where and how development within the local area should take place
- provide a plan-led framework for rational and consistent decision making

The infrastructure investment should be targeted to release the greatest economic potential and support inclusive economic development that provides the opportunity to sustainably increase GVA, and the ability of the region to compete internationally.

This should take into account the global trend for the role of cities within society, both in terms of population growth enabling more sustainable and efficient infrastructure provision, and in the growing role of cities in terms of economic growth. Successful regions have strong and vibrant cities at their core. Belfast drives much of the economic growth and shares its wealth across the Region and as such the role of the future city needs and requirements in terms of residential, economic, health and well-being and place-making should be at the heart of the infrastructure provision.

The Belfast Agenda highlights that modern and secure digital infrastructure is vital not only for the city's economic success, but also in its role as an economic driver for the region. Advanced digital infrastructure is a pre-condition for many of the Belfast Agenda's aspirations including future economic competitiveness and attracting investment, providing connectivity for future business growth, and enabling innovation in business, research and development, as well as innovation in delivery of public services. In placing inclusive growth at the heart of The Belfast Agenda, and setting our goals to connect people to opportunities arising from a successful and growing city economy, it is necessary to advance the development of a modern and sustainable digital city infrastructure that can facilitate and sustain these opportunities.

There are two main ways of thinking about digital and infrastructure:

1. **Digital connectivity** (ie) the fibre and wireless infrastructure required to connect households and businesses.
2. The **digitalization of 'hard' infrastructure** (ie) embedding digital technologies in the design, build and management of 'hard' infrastructure, such as buildings, transport, energy, water management systems. Needless to say, is dependent on (1) above.

## Q2. How do you see infrastructure needs and demands changing over the long term?

Globally, there are several recognised key drivers and emerging trends which influence digital infrastructure needs and shape methods of infrastructure delivery both now and in the future. It is assumed that many of these will also relate to Northern Ireland in some form. These key drivers and emerging trends include:

- Population, housing and employment growth
- Changing working and shopping / spending patterns
- Changing demographics – aging population - increasing demand for homes + smaller household sizes
- Urban densification and regeneration – desire for city centre living
- New technologies, artificial intelligence and automation
- Increasing use of smart technologies and environments – disruptive technologies
- Growth in Ultra-low emissions vehicles- public transport, private transport and freight –impacts on the grid and step change in demand for renewables in this decade
- Reduction in Greenhouse Gas Emissions
- Brexit
- Covid-19

In terms of Digital connectivity:

The vast majority of homes (89%) in Northern Ireland can now access superfast broadband, which offers download speeds of at least 30 Mbit/s. However, availability of superfast broadband in rural areas, at 66%, is lower.<sup>43</sup>

**Project Stratum**, which is aimed at those unable to get superfast speeds, the Department for the Economy has identified 97,000 premises in Northern Ireland that will be eligible for a broadband boost. This £165m project began in mid-2020.

**Mobile:** 75% of the Northern Ireland's land area is covered by good 4G reception from all four networks. And 97% of the country can get reliable 4G from at least one operator. But there are stark differences in the level of choice available to customers in urban and rural areas. Ninety per cent of urban areas can get 4G coverage from all four operators, compared to 74% of rural areas.

Mobile operators have worked with Government and Ofcom on a plan to introduce a '**shared rural network**'. This will see high-quality 4G coverage reach 95% of the UK by 2025, as mobile companies share their existing masts and invest in new sites.

**5G launched in 2019**, with all four mobile networks rolling out 5G across a total of 40 UK towns and cities. Initially, 5G will be an enhanced version of 4G – offering faster speeds. But in the longer term it can support a host of innovative new services for mobile users and businesses, from farming to factories.

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<sup>43</sup> <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2019/latest-northern-ireland-broadband-and-mobile-coverage-revealed>

<sup>43</sup> Infrastructure Enabling Fund Strategic Outline Case 2019, p9.

**Belfast Region City Deal** – The **Infrastructure Enabling Fund (IEF)** will not be focused on household or individual business connectivity. Instead it is designed to provide funding in support of strategic projects and programmes aligned to the Belfast Region’s Digital Innovation ambition. The fund will mainly focus on additional cutting-edge Fibre, Wireless and IoT infrastructure.

IEF will spur significant wider economic growth the Belfast Region. Based on the findings from a DCMS 2018 report, IEF will bring an annual increase of 0.8% in employment and a 0.3% in productivity. Applying conservative assumptions, it is estimated that £359.5 million of additional GVA (2018£) will be generated over the 20-year period between 2019 and 2039. This represents a cost-benefit ratio of 8.5.<sup>44</sup>

The ‘digitalisation’ of hard infrastructure coverages a range of topics:

The utilisation of digital **Building Information Models (BIM)** and **Geographical Information Systems (GIS)** for the design, procurement and ongoing whole-life management of infrastructure including buildings.

Embedding digital technologies into hard infrastructure – by exploiting **Internet of Things** sensors and networks. These allow for the lower cost management and monitoring of infrastructure.

The development of **Digital Twins**<sup>45</sup> – Drawing from BIM and IoT systems (and cloud, AI and wireless technologies) to create a virtual twin of the hard infrastructure. This allows for fine-grain monitoring, analysis and predictive modelling. It also supports more holistic planning across a range of complex systems. Digital Twins can range from individual buildings right up to entire cities.

Furthermore the convergence of Digital connectivity with Digital infrastructure provides further opportunities for consideration with respect to Infrastructure policy. For example, UK DfT already studies value of time to factor into transport modelling and management (<https://www.gov.uk/government/publications/values-of-travel-time-savings-scoping-study>). This already puts development of digital infrastructure as a substitution for travel to the fore in developing future travel scenarios. Therefore, even travel and transport infrastructure should take into consideration the role of digital and ICT.

### Q3. What works and what doesn’t work in the current system of infrastructure decision making and delivery?

Collectively, digital technologies can support more integrated, resilient, responsive and efficient infrastructure. They will allow the city to flex and adapt to challenges, shocks and stresses such as climate change, emergencies, and technological disruption (eg) introduction of autonomous and/or electric vehicles.

Elements of these approaches have been adopted piecemeal by individual organisations. Their real impact can best be achieved collectively and at scale. There is an opportunity to develop joint approaches within the context of the planned Belfast Smart District. It will be a complex urban environment but at a small enough scale for partners to develop joint approaches in a manageable way.

Of particular note is Northern Ireland planning legislation for wireless deployment which is not concurrent with GB legislation. Work is required to update Permitted Development to include recommendations for the Future Telecoms Infrastructure Review. (This legislation sits with DfI.)

Recommendation re need to coordinated approach to opportunities re digital deployment:

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<sup>44</sup>Infrastructure Enabling Fund Strategic Outline Case 2019, p9.

<sup>45</sup>In Christchurch, New Zealand, the city is collecting real-time data on things like pedestrian and vehicle traffic flow, water and air pollution to find ways to improve the quality of life for its citizens.

The deployment of next generation wireless technologies is recognised as a critical foundation stone for a successful modern economy. Belfast is no exception. The city has committed to supporting, and jointly investing in, next generation digital connectivity across the city in support of ambitious economic, environmental and societal goals. In particular, we have committed to significant digital investments through the Belfast Region City Deal to support cluster growth, world class academic research, and societal impact.

However, there are significant challenges to the timely and comprehensive deployment of such infrastructure – particularly in the urban environment (something which UK Government has recognised in the Future Telecoms Infrastructure Review).

A key success factor is maximising the opportunities to deploy digital hardware as part of ‘hard’ infrastructure projects (eg) new roads, buildings, street lights, bus shelters, etc.

DCMS have encouraged cities to create barrier-busting teams that bring together planners, asset and infrastructure owners, the local authority and private sector to identify and plan for these opportunities. Done well, these barrier busting teams reduce costs, street clutter, and support economic growth.

As the major public asset owner in the city, the Department of Infrastructure has a critical role to play in supporting this work (alongside colleagues in the Dept for Economy and Dept for Communities).

#### Q4. Do you have any comments on how infrastructure decisions are currently made in Northern Ireland? Would you propose any potential reforms to the current decision making process? How could these reforms be best achieved?

As previously noted Northern Ireland planning legislation for wireless deployment is not concurrent with GB legislation. Work is required to update Permitted Development to include recommendations for the Future Telecoms Infrastructure Review. (This legislation sits with DfI.) Other potential areas for consideration include:

Many UK cities have established cross-sector **‘barrier busting’ groups** that seek to support fibre and wireless deployment. Such groups have a role in providing easier access to assets; supporting better engagement with industry; identifying opportunities to deploy ducting and/or dark fibre as part of any larger scale hard infrastructure projects such as road or street schemes, etc. There is a need in Belfast for such a barrier busting group – with initial work under way by Belfast City Council supported by consultants Real Wireless.

Develop a **‘Mobile Action plan’** for Northern Ireland that seeks to develop a supportive environment for the deployment of digital infrastructure across the city and the region.

Consider the **development of shared infrastructure** (particularly in the urban environment) - (ie) working with industry to deploy shared ducting/fibre/wireless infrastructure to help reduce costs and urban clutter while at the same time supporting the innovative adoption of digital technologies by businesses and more extensive coverage.

A single shared connectivity map (similar to London <https://maps.london.gov.uk/connectivity/>) could be considered to assist investors, infrastructure providers and decision-makers in channelling support and addressing “not spots” where digital infrastructure is not of a sufficient standard.

**Develop a common public sector approach to BIM/GIS** (eg) common data, asset audits and shared register, and standardised processes. Introducing awareness and skills programmes for management and exploitation of BIM. Introducing BIM requirements into contracts for build and management.

**Leveraging physical investment to deployment fibre and wireless infrastructure.** (ie) Ensuring that all relevant hard infrastructure projects support the deployment of digital connectivity (eg) by deploying ducting, mounting points for wireless infrastructure, etc. Use of common asset registers and working through joint barrier busting group.

Develop proposals within the **Belfast Smart District** to develop joint approaches to digitalisation of infrastructure. (See note below). And seek to use learning from successful projects to deploy in other parts of the region. (There are specific opportunities to consider this in relation to mobility, energy and waste water management.)

There are three lighthouse projects being developed as part of the Smart District that can support a shared approach to infrastructure at a city and regional level which both help develop digital infrastructure practically and demonstrate the case for it, whilst also relying on it:

**Modelling integrated urban mobility.** This proposed Smart District lighthouse project seeks to work with partners to develop sophisticated digital twins of the district mobility systems (using existing data, IoT, AI, etc) to support the deployment of multi-modal transport solutions in the city.

**Energy District** - This proposed Smart District lighthouse project seeks to work with partners to utilise hydrogen and renewable energy to develop a district level holistic energy network. The project would seek to incorporate zero-emission public transport solutions, district heating, waste water treatment, and energy storage to address renewable curtailment issues,

**Smart Healthy District** – Working with the Universities, Life & Health Sciences sector, housing bodies, and public services providers to develop a real-world environment where technologies and services can be developed, tested and deployed to support whole-life multi-generational living. The District will not only support world class research and private sector product development, it will also act as a demonstrator for the development of next generation services. There are opportunities to consider in a holistic manner building design, street design, energy, mobility solutions, etc.

**Q5. The Ministerial Advisory Panel have been asked to develop a proposal that will identify the specific role and value of a Commission and how it might be established and might operate. The next set of questions will test the viability of an Infrastructure Commission in Northern Ireland. Would you support the establishment of an Infrastructure Commission in Northern Ireland?**

Yes. An independent, expert-led Infrastructure Commission that is transparent and accountable, focusing on strategic prioritisation and delivery could bring value. The Commission should define infrastructure broadly, and should seek to integrate the operation of various infrastructure classes, working together to meet government objectives. If the focus is clearly on developing a strategy which will incorporate an infrastructure plan with associated delivery in the form of projects and priorities to improve both the quality and impact of infrastructure development. As suggested in the circulated research it needs to move beyond the consideration or management of individual risks or assets (beyond just DfI aspects), to the systems as a whole.

## Q6. What value would an Infrastructure Commission bring to Northern Ireland?

An independent, expert-led Infrastructure Commission could add value by;

- Offering independent expert advice to government
- Take a coherent and integrated approach to reviewing the operation of NI's infrastructure
- providing a challenge role in the reviewing of proposed infrastructure projects
- Helping to prioritise and develop Infrastructure Plans with the ongoing monitoring of delivery
- Helping to prioritise infrastructure projects
- Conducting expert reviews of ongoing projects to keep them on track
- Increasing accountability and transparency
- Provide advice on the resiliency of infrastructure- the extent to which it is fit for the future

## Q7. How might the Infrastructure Commission be established and operate? (Pick one or more options)

Independent, focussing on Prioritisation and Strategy

## Q8. What scope do you believe the Infrastructure Commission could / should have?

- Hard infrastructure (water & waste, drainage and inland waterways, public transport, roads and cycling infrastructure)
- Digital and communications Infrastructure
- Energy Infrastructure
- Housing Infrastructure

## Q9. What time period should an Infrastructure Commission focus on?

20-30 years linked to regional strategies

## Q10. The Infrastructure Minister aims to deliver cleaner, greener, sustainable and inclusive infrastructure. How could an Infrastructure Commission support these objectives?

The Infrastructure Commission must keep a focus on ensuring NI's infrastructure will deliver inclusive benefits and impacts for people, in particular to drive opportunity for those in greatest need by supporting jobs led economic growth. For example, the Commission will need to pay attention to how infrastructure can support improving digital inclusion, to ensure all citizens are able to benefit and participate fully in the city and NI region of the future, in accessing services, training and skills development, in work/business and in maximising engagement and participation in civic life and leisure opportunities. This requires significant focus and investment to address the needs of those in society who are 'digitally excluded' at present; whether this be through lack of access to IT equipment, connectivity or skills, and also requires innovation in how services are delivered. The infrastructure Commission must ensure that NI's infrastructure is driving progress towards the 2050 net zero carbon target, as required under legislation. Furthermore it should seek to ensure achievement of UN Sustainable Development Goals, as other countries infrastructure commissioners are doing. It should seek to ensure climate resilience is a core design requirement for all future infrastructure, and that it contributes to the wider resilience of NI society. We should, also, be conscious of the energy infrastructure that is required to support digitisation and, here, Northern Ireland is positioned well to take advantage.

An Infrastructure Commission can provide benefit through independent oversight and guidance of emerging plans and delivery projects to ensure the maximum benefit in delivering green, sustainable and inclusive infrastructure. The panel should also be suitably qualified to provide the expertise in best practice and learning from international infrastructure delivery and city growth.

The approach for the Commission should not be about seeking to provide for all the future infrastructure needs upfront, it should develop the capacity or processes for identifying and planning the trigger points or indicators that will point towards new or upgraded infrastructure requirements at the appropriate times, ensuring that the infrastructure can be operational when they are reached alongside the collaboration needed to achieve such an integrated model.

The Commission should take into account the role of the local authority to influence, lead and deliver cross-cutting infrastructure requirements based on community planning, and enabling enhanced greener, sustainable and inclusive infrastructure. Global cities are taking on a greater role in leading economic and place making provision, and collaborative working such as the Bolder Vision for Belfast has shown how local authorities in NI can lead and influence the direction of travel for the city residents and users across economic, social and sustainable provision.

#### **Q11. What specific role should a Commission play in NI?**

An Infrastructure commission in NI can provide a statutory advice role, an oversight and challenge role, and provide strategic advice and knowledge on the development and delivery of infrastructure policy and projects in NI to ensure effective, sustainable and efficient delivery of the infrastructure requirements.

As noted above there needs to be an approach that ensures or helps support a process where infrastructure investment decisions can be made and ensure delivery on a long-term basis that sits beyond the standard political decision making timescales.

#### **Q12. What is the minimum project value (£m) that the Infrastructure Commission should be engaged at (if it is involved at project level)?**

£30m

#### **Q13. What stage of the infrastructure lifecycle should the Infrastructure Commission be involved in?**

The infrastructure commission should be involved in the early process of strategic planning and the prioritisation of strategic project delivery. The commission should also have a challenge/ oversight role in the delivery of infrastructure projects to ensure adherence to, and delivery of green, sustainable and inclusive infrastructure in the delivery of the longer-term aspirations and outcomes.

#### **Q14. To what extent do you think that the Commission should be tasked to hold Government to account?**

As an independent body the Commission should have the authority to challenge and to provide advice on infrastructure delivery and prioritisation. The commission should through the strategy development be able to provide recommendations to the infrastructure delivery bodies, and to the NI Executive / Committee for Infrastructure.

#### **Q15. There is a lot of ongoing debate around procurement issues at the minute. Should the Infrastructure Commission engage on procurement issues?**

Yes, including providing advice and experience on funding options and routes to procurement.

#### **Q16. If created, should an Infrastructure Commission be responsible to;**

NI Executive – accountable directly to the Infrastructure Minister or Finance Minister

**Q17. Which international Infrastructure Commission model do you think is most appropriate for Northern Ireland? Please provide your reasons for selection and deselection. Please note that a summary of each of these models is contained within Appendix G.**

The Independent Strategy & Prioritisation Organisation model would be the most appropriate fit for NI. The models provided for Australia and the internal states provide for a remit for the setting the policy agenda on long-term opportunities for infrastructure and evaluating business cases for nationally significant investment proposals. The 'place based' approach on infrastructure planning, providing advice to government, industry and communities allows for a wider approach to infrastructure delivery, taking into account wider societal and economic considerations rather than the typical siloed or political led infrastructure decision making process. The long term 30yr infrastructure strategy of Infrastructure Victoria with a 5yr Infrastructure Plan Projects Pipeline allows for long term prioritised planning with a focused approach on short-medium term delivery.

It should also be noted that, in regard to cities in particular, the role of the local authority in Northern Ireland differs from much of the rest of the United Kingdom and the majority of the examples provided. The role of the local authority within growing cities that have a significant economic role within the region should be considered in terms of their expertise and experience in developing the city infrastructure requirements. Opportunities should be provided for cities to influence and deliver infrastructure that directly aligns with the cities growth agenda and economic targets, while ensuring that infrastructure provision is not siloed, but takes into account community and place making focused infrastructure to provide places to work, live, visit and enjoy.

**Q18. Do you have any additional comments on how the Infrastructure Commissioners role should operate in regard to Stakeholder engagement and any recommendation or evidence of best practice on how this can be achieved?**

In its approach to stakeholder engagement, an Infrastructure Commission should acknowledge the importance of focused consultation within key infrastructure sectors, but also the need for cross-sectoral engagement that recognises the relationships (direct and indirect) between different sectors, and the value of interagency working in understanding issues and their impact, and in identifying synergies that can drive efficiency in the delivery of sustainable infrastructure solutions.

Stakeholder engagement by a Commission should reflect the far-reaching impacts of infrastructure decisions and enable integrated consultation, and decision making, that directly links city priorities such as connectivity and climate change, which have direct relevance to the city's infrastructure. When considering stakeholder engagement the commission should take into account the importance of the role of local communities when considering infrastructure provision, ensuring that communities are adequately represented, informed and enabled to take part in the formation of infrastructure planning, design and decision making.

The Belfast Agenda is the first interagency plan for the city, and identifies that infrastructure planning for Belfast needs to be taken forward in a strategic and integrated way, with a core goal of the Agenda being to create a partnership and plan for sustainable urban infrastructure. An interagency approach to infrastructure that identifies cross-cutting themes and complementary interventions should aim to support sustainable and inclusive growth to 2035 as outlined in the Belfast Agenda and the Belfast Inclusive Growth Strategy.

The Local Development Plan 'Draft Plan Strategy' also recognises that cross-sectoral infrastructure planning is integral to the day to day operation and socio-economic sustainability of the city, which should be reflected in the approach to engagement and consultation.

The role of a future Infrastructure Commission should include consideration of factors which fall outside the immediate remit of the Department for Infrastructure, and timely stakeholder engagement across sectors including for example, social infrastructure, and green and blue infrastructure will be necessary.

## A response from Imtac

What are we seeking to achieve from infrastructure, why is it important, how do people see the needs changing over the long term?

Imtac views the design and provision of infrastructure as being central to building a more inclusive and fairer society. It can be the difference between people being isolated and people being active members of our communities.

What works and what doesn't work in the current system of infrastructure decision making and delivery?

Although there have been improvements around inclusivity in both decision-making and the delivery of infrastructure in recent years, too often opportunities are still missed to maximise investment and improvements to benefit everyone in society. This can often be linked to a lack of awareness and basic understanding of what creates barriers for many. The planning process is also an issue as plans are often outdated. Additionally investment in supporting infrastructure including transport does not materialise.

Do you have any comments on how infrastructure decisions are currently made in Northern Ireland? Would you propose any potential reforms to the current decision making process? How could these reforms be best achieved?

There are 5 key requirements that must be met to deliver more inclusive infrastructure – (1) a clear commitment to make infrastructure inclusive, (2) a clear understanding of how to make infrastructure inclusive, (3) a clear direction, (4) direct engagement with those affected by inclusion / exclusion and (5) clear and enforceable standards around inclusion.

Would you support the establishment of an Infrastructure Commission in Northern Ireland?

If a Commission is established it must be something more than another layer of bureaucracy. Clearly from Imtac's perspective it must have a clearly defined remit to promote social inclusion.

What value would an IC bring to Northern Ireland?

Responsibilities for infrastructure and the services delivered on or through that infrastructure are spread across a range of Government Departments and as a result there is often a "disconnect" in objectives. A Commission could bring a focus which is cross Departmental. It would see the value in investing in infrastructure and the connections it creates rather than viewing issues through Department "silos".

How might the IC be established and operate?

- a) Should this be an entity that is a) Independent, focussing on Prioritisation and Strategy b) Independent, facilitating Public Debate Organisation or c) Government led? D) Independent, focussing on individual projects/programmes? E) combination of a, b and d
- b)
- c) Please provide your rationale for your selection

We believe "C" would not be in line with the principles of establishing a Commission. "E" would seem to be the ideal but would it be trying to do too much and end up doing too little. This option might be more practical if it did not focus on detail of individual projects.

What scope do you believe the Infrastructure Commission could / should have, and over what period of time? (Hard infrastructure, digital, energy, waste, housing, education & health infrastructure )(20, 30, 40, 50 years?)

Scope should be as wide as possible. It is important when planning physical infrastructure that the nature of the services connecting to/providing access to that infrastructure are included. No point building centralised hospitals if people cannot access them. 30 years would fit with climate change targets which will be a significant element of a Commission's remit.

The Minister wants to deliver cleaner, greener, sustainable and inclusive infrastructure. How could an Infrastructure Commission support these objectives?

BB also keen to get a clear indication of meeting duration as this will largely determine what can feasibly be discussed

What specific role should a Commission play in NI?

- a. Long term vision (10+ years) Yes – and longer? see Q7
- b. Strategy/Plan formation Yes – but how does this fit with Planning System
- c. Monitoring and reporting on success or otherwise of infrastructure implementation
- d. What level of project (£) value the IC be engaged (if it is involved at project level)? Project level (ie design commissioning) too low?
- e. What stage of the infrastructure lifecycle should the IC be involved in?
- f. To what extent do you think that the Commission should be tasked to hold Government to account? No Comment
- g. There is a lot of ongoing debate around procurement issues at the minute. Should the IC engage with this? No Comment

If created, should an Infrastructure Commission be responsible to;

- NI Executive
- FM & DFM
- Infrastructure Minister
- DfI
- DoF
- DfE
- Other Departments

If a Commission is dealing with Strategies/Programmes across a number of Departments/Authorities it could lead to a clash of interests if one Department has responsibility/control. This would imply the NI Executive should have oversight.

Do you have any additional comments on how the IC role should operate in regard to Stakeholder engagement and any recommendation or evidence of best practice on how this can be achieved?

The membership of a Commission must address knowledge and expertise across the cleaner, greener, sustainable and inclusive agendas. While there clearly should be an onus of a Commission to engage with the widest range of stakeholders there is a bigger onus to ensure membership reflects its priorities / remit and society more generally. While the public appointments system has provision to ensure that the recruitment/appointment process is fully inclusive, the Commission's function may benefit from having a specific appointment to represent the older people and disabled people

The Commission should have powers to require that all Strategies/programmes/projects are subject to review/scrutiny involving stakeholder engagement at all stages ensuring the needs of all of society including disabled people, older people and Deaf people are taken into account.

## APPENDIX 6 TRANSCRIPTIONS FROM A DIVERSE SAMPLE OF VIRTUAL CONSULTATIONS

The following transcriptions are taken from a diverse sample of the virtual consultations, undertaken during the course of the Panel's work.

## **Consultee: ACE**

### **Role and make-up of an Infrastructure Commission**

An Infrastructure Commissioner should be involved in all stages of the life cycle, thereby ensuring that a project with strong governance and monitoring at the beginning of a cycle doesn't fatigue before the end. There should be a commitment to ensuring monitoring and evaluation is more effective. If you have adjudicator keeping their eye on high-level projects, that's more beneficial to NI than being in at design phase.

ACE suggested that an Infrastructure Commission needs to sit as a monitoring body within a Department, which will handle the financing and policy. An independent Infrastructure Commission would be too vulnerable to biases from outside government, particularly the influence of private development, instead ACE suggest that an independent department would be best suited that can monitor and provide feedback to the NI Executive.

### **Long-term versus short-term**

ACE suggest that an Infrastructure Commission sit for no longer than 20 years due to political reasons. If you have an Infrastructure Commissioner which sets out framework in 30 – 50 year period, by the time parties change, civil servants move about, no focus on short term projects, that harms people of NI. Long term planning and funding in place is important, but on short term basis there might be more political focus. If you have a short-term focus, you could get some progress done, instead of 50-year project. If you're talking about a minister changing every two years, imagine 50 year plan. With 20, at least some remit to focus on that.

### **Engagement with society**

Regarding engaging with communities and achieving social targets, developing social infrastructure is an effective tool for achieving societal aims. However, this would require monitoring by the Infrastructure Commission rather than setting output and location targets which can be politically divisive. Targets also need to be taken away from purely financial driven targets and toward these four other outputs, you start a Commission with this as gold standard for how to enhance outputs in NI. That would be ideal, something we're bringing to govt. departments.

### **Best practices**

ACE suggest that an Infrastructure Commission adopt the Five Capital Model, which addresses natural; financial; human; manufactured; and social targets. This would help to address shortcomings in previous projects. For example, new build housing in Aberdeen where suburban estates link into a city or a town but have no immediate facilities, namely parks and schools, leading to increased congestion and limited community engagement.

In regard to the Infrastructure Commission in Scotland ACE and suggest that their issues are currently in the concept of placemaking for infrastructure, particularly the Highlands and Islands problems are connectivity, internet access and public transport and look at these on a lifetime perspective.

## **Consultee: Andrew Haley – Ministerial Advisory Group for Architecture and the Built Environment**

### **Role and make-up of an Infrastructure Commission**

Mr Haley from the Ministerial Advisory Group for Department for Communities suggested that currently infrastructure is working in silos and so NI needs to inspire collaboration and ensure that resources are ensuring best outcomes for the people of NI.

There is also a challenge of providing a wider understanding of the importance of infrastructure as well as providing understanding to outside developers how a Commission would be independent yet also potentially sit within a government department, currently the connection is through Department for Infrastructure, but the remit needs to be cross-party as well as to all councils in NI and society. Meanwhile independence is also important to ensure a Commission would be seen positively for those looking in and helping to inform them about this independence, it was suggested that civil servants understand this independence, but big developers may not.

An Infrastructure Commission would need to be connected to Government in some way and it would be important that they have the right skills set to meet what is required of them as well as ensuring that those who sit on the Commission work well with each other. The members need to be advocates to help individuals achieve their goals. There should also be cross-over between other groups to combine expertise as well as engage with council to show how a Commission could benefit them and provide expertise which they may be lacking.

An area of current weakness in NI is measure outcomes, post-project evaluations and gathering the benefits to learn lessons and best practices so this is an area which needs addressed as well as allowing an organisation to share the lesson learnt without being criticised.

Mr Hayley suggested that it would be important to see if Ministerial Advisory Group could work together with an Infrastructure Commission to ensure two groups aren't doing the same thing and so it is worth exploring a way of shared working.

### **Best practices**

When addressing the make-up of the board it was suggested to learn best practices from Ireland but apply it here given the political situation. Also NI can learn from England and Wales who made boards diverse such as background of individuals, gender balance, LGBT, BAME which is important to ensuring decisions are made for all, however this will require preparatory work to ensure more people know about the Commission and apply. Mr Hayley suggests that it is beneficial to recruit a Chair first and then send out applications for tender for board members. It may also be worth having a champion for projects.

## **Consultee: Belfast City Council**

### **Role and make-up of an Infrastructure Commission**

BCC suggested that this was a good opportunity to set up a Commission from scratch and so it can be orientated around certain goals such as climate change with an overall holistic approach.

It was envisioned that a Commission could provide advice but there needs to be an assurance that Government is taking this advice and if not held accountable. The Commission should be highly independent to achieve this and in a way lead government on issues as well as take risks. Individuals who may work on the Commission need to be experts who want to be part of it and realise its importance to drive it forward.

It should also be a credible organisation made up of credible figures who can sit on par with the UK Commission, the example was given of OBR which is an outside organisation that is highly respected and listened to. The Commission also needs to have a place orientated approach and be investor friendly.

In regard to collaboration, BCC suggested that there is also an opportunity for housing to be involved in this type of planning, it was expressed that housing was rarely involved in planning which needs addressed. Currently projects are occurring in silos which is causing frustrations and so going forward everything such as housing, water and energy should be integrated which a Commission could help with.

### **Climate change**

BCC suggested that net zero carbon needs to be at the core of infrastructure plans, and this is supported by demand from the public to address climate change.

### **Brexit and COVID-19**

Regrading Brexit and COVID-19 an Infrastructure Commission could help to plan what the recovery and deal with challenges from Brexit whilst keeping the politics of the issue out.

### **Long-term versus short-term**

BCC suggested that any future Commission needed to be mission orientated with problem solving capabilities over the long-term of around 50 years.

## **Consultee: CBI**

## **Consultee: CBI**

### **Role and make-up of an Infrastructure Commission**

CBI are very supportive of the implementation of an Infrastructure Commission for NI and suggest that such a Commission could support NI Executive leadership. The CBI highlighted the UK government's plans for a "New Deal for Northern Ireland", and stressed a commission could provide an NI Executive- driven framework for long term investment, rather than having one led by Westminster.

The CBI did however draw an important distinction between the future role of the SIB, and the role of an Infrastructure Commission. They proposed that the SIB could ensure timely and cost-effective delivery of projects, whereas the Commission's principal function would be long-term strategy and prioritisation of infrastructure. They added that SIB's role would need to be reviewed as part of the process to create a workable, efficient framework.

The CBI highlighted that an Infrastructure Commission could help to make NI investor friendly and show a seriousness in NI's development.

An Infrastructure Commission can help to ensure that projects are properly planned and financed for and the Commission could also support additional finance applications to the UK Treasury. Currently there is a reliance on the block grant, to achieve zero net carbon, amongst other things, NI needs to look at other funding models, including mutualisation.

### **Long-term versus short-term**

An Infrastructure Commission for NI would also help to support the planning and delivery of complex projects which fit within a long term (30 year) strategic outlook, which may be more difficult for politicians to judge when operating over the 4-5 year life of an Assembly.. This Commission could also help to depoliticise and prioritise infrastructure decisions in NI and make decisions which are beneficial for all of society. It could also provide an objective, expert led understanding about the benefits of a long term strategic outlook on infrastructure to politicians.

The Infrastructure Commission should be a permanent structure but shouldn't be taken as a given and should be reviewed with clear parameters for progress to provide accountability and make sure plans are delivered. It must however be independent with sufficient statutory powers to achieve its objectives.

### **Best practices**

The CBI suggest that while any future Commission be independent of politics, the Commission should be accountable to the NI Executive as a whole rather than one individual Minister or department. They acknowledged that this could provide its own challenges but this could be balanced by providing the Commission with sufficient statutory powers. This would require an acceptance from the NI Executive that they will be held to account from an outside body. The CBI suggest that lessons must be learned from SIB who have struggled because of their lack of statutory powers, meaning that they have become more of a consultancy type body.

An Infrastructure Commission would allow for a clean mandate and need not be overly costly, as some SIB personnel could be redeployed.

### **Climate change**

The CBI highlighted the water issues that NI is currently experiencing, and these are likely to worsen without action, there is also the issue of meeting net zero carbon targets. They added that achieving net zero carbon should be a principal driver for an independent body as it is a statutory commitment, not just an ambition. In that regard, NI lags behind all other administrations on these islands for long term planning around climate change.

### **North-South relationship**

Meanwhile the North-South relationship needs to be considered in any future planning. The Republic of Ireland has Project Ireland 2040, and NI risks falling behind in infrastructure if it doesn't have a similar long term plan. They added that many of the areas of N/S Co-Operation (for example, energy and transport) under Strand 2 of the Good Friday Agreement provide a strong structural framework for meaningful all-island engagement on long term infrastructure planning. The CBI is heavily engaged with IBEC and the Joint Business Council on these issues.

## **Consultee: CEF**

### **Role and make-up of an Infrastructure Commission**

CEF suggest that a Commission should not sit within a department as it will be politicised, and infrastructure also doesn't work alone. There should also be political buy in but a distance maintained.

CEF question the role that SIB would play and whether this Commission would be joined to SIB. The role of the Audit Office and work they produced also needs to be addressed, they already produce work on major failing related to capital projects and so there is potential of doubling this work. Procurement is also a major issue in NI the examples of legal challenges on the A8 were provided, therefore there should be lessons learnt from the past.

To be successful an Infrastructure Commission Strategy needs to sit above procurement and finance, they would also need to sit in or owned by the NI Executive, but not be driven by political persuasions and accountability is crucial.

### **Funding**

CEF note the preoccupation in NI with the block grant and that we are relying on the Treasury to fulfil NI's needs, we need to justify to Treasury why and what is done with the money. Decisions are also made for political reasons such as when the Department for Infrastructure had 75% of capital budget for major road schemes. Therefore, there can't be underspending in one area and overspending in another, particular the finance element is skewed towards major projects. In a post-COVID-19 and Brexit world alternative finance models need to be explored and this is vital in ensuring that the Commission would not be an academic research body.

### **Energy**

CEF express that some projects appear not as critical as they need to be for example the energy infrastructure document and so this is where a strong, independent voice could come in to help advice over the best decision making. Meanwhile in the planning system currently it feels as though there are a small group of people in and around significant projects, possibly over consulting on things which needs to be addressed. This over consulting can exceed the timeframe for a business case causing the project and finance to become obsolete.

### **North-South relationship**

Infrastructure also needs to be addressed on an all island basis, for instance there's a single energy market on island of Ireland meanwhile the rail connections need addressed. Typically, these issues get politicised and that's where problems arise.

## **Consultee: City of Derry Airport**

### **Role and make-up of an Infrastructure Commission**

The current NI system of multi-departmental agreements as well as waiting on UK based decisions for leadership can cause a sense of frustration for planning and projects, for the airport specifically there is no regional airport policy and things are dealt with on an ad hoc basis. An Infrastructure Commission may help to improve policy making and the speed at which decisions are made.

An Infrastructure Commission could assist with creating a more balanced view as they can assess projects independently, currently the City Deal are an encouraging step for NI at providing inclusive growth and levelling up the agenda to address the internal imbalance within NI. Additionally, with COVID-19, there has been a shift in focus and the implementation of an Infrastructure Commission would be a good news story.

The makeup of any future Infrastructure Commission would need to be of experts, in regard to their transport sector there is not always expertise on this in NIO. The Commission could also bring an aspect of better decision making as well as influence with a long-term vision, leadership and project delivery.

### **Best practices**

Scotland, due to their multiple regional airports have been able to develop the Highlands and Islands support which helps address the disproportionate costs associated with regional airports. Analysis and implementation of targeted bespoke measures would be justified on another 'Island' and one which is uniquely accessible directly by car to Ireland's Airports with no APD and who also benefit from a Regional Airports Program.

### **Funding**

There appears to be a reluctance in using the block grant with a reliance on the UK policies to dictate funding. For the City of Derry Airport like any other industry or part of industry when there is a differential, this approach will never address the differential without a specific injection of funds or appropriate allocated budget.

### **APD**

Removal of APD, (most likely short-term and driven by HMT) will have some effect to passenger numbers, however, will be less effective as a short-term measure for CoDA than our counterparts in Belfast. Removal of APD using a flexible PSO approach would deliver targeted benefits to airports, improve connectivity and in CoDA's case, reduce our subvention requirement. The unique geography and relationship with Ireland needs consideration in all topics above.

## Consultee: NI Water

### Role and make-up of an Infrastructure Commission

An infrastructure Commission made up of individuals with the appropriate range of industry and commercial expertise and independent of political parties and the NI Civil Service can help to provide understanding as to why infrastructure projects are necessary and require funding. Overall the Commission should be headed up by a well-respected, suitably experienced and capable individual who can carry this important brief.

NI Water highlighted that infrastructure does not exist in silos and there are different forms of infrastructure all of which require a long-term plan to be successful for all of society and independence is important to making funding and planning decisions.

The vision that an infrastructure Commission and system would require in NI may include:

- Key outputs with priorities
- Long-term outlook
- Delivering complex projects
- Help government planning
- Long-term capital intentions
- Good appointments that provide leadership
- Facilitates sustainable financing
- A differentiation between core, essential infrastructure and projects which might be considered more “iconic” or “flagship” in nature
- Provide an understanding and education of infrastructure to a wider audience NI Water highlighted that needs for infrastructure to be futureproofed and gave the example of Silent Valley which has been providing water for Belfast for 100 years, its developers had a long-term vision which is something NI needs to get back to. A focus on infrastructure and long-term vision can also help to attract further investment to NI, but this needs leadership which an Infrastructure Commission can provide.

The Panel asked NI Water if it feels the Utility Regulator (UR) has a pivotal role to play.

In response, NI Water shared it feels the role of the UR can be key to ongoing provision of water and wastewater services and also noted the role the Regulator has in the case of energy as well as water and wastewater infrastructure. Given that NI Water is publicly owned and predominantly funded by public money available only through the NI Block Grant, the question arises from time to time as to whether an independent regulator can inadvertently become constrained in assessing whether sufficient funding is able to be made available to a regulated government owned Water Company. Perhaps the regulator might feel more muted than is desirable in assessing whether a government shareholder is doing all required of it in considering how adequately financed a regulatory settlement is at the outset and throughout a price control period.

### Funding

There is an overall societal benefit that infrastructure can bring to NI which an Infrastructure Commission can provide leadership on, it would also help to gain access to different funding opportunities and move away the reliance on the block grant for funding. It was discussed that all stakeholders reached a conclusion during this current price control, PC15, that the current model, whilst it has worked to an extent successfully, particularly during the early years of its incarnation in 2007, has now reached a point where, as a result of funding constraints and uncertainties which have prevailed for some time, it is now broken and needs to be replaced, in its funding aspect, by something much more capable of allowing the service to be successfully delivered for customers across the next 10 to 15 years.

## Best practices

An Infrastructure Commission could help to provide a fair and transparent process which was highlighted in the Hillary Review which has been lost somewhat recently. There is an ambiguity and a lack of transparency as to how the service to customers is paid for, by whom and in what time horizon. Many domestic customers believe, because they have been told, it is paid for through their domestic rates. Whilst there may be a reference to a significantly small amount of a household rates bill paying for water and sewerage services, the amount that is notionally allocated is wholly inadequate.

That customers don't know how the service is paid for, and that it has been underfunded for many years, could be seen as neither fair nor transparent.

## Long-term versus short-term

The Infrastructure Commission would also need to be in place for at least 5-10 years which is sponsored by the NI Executive but remains independent and made up of subject matter experts, not individuals with generalist knowledge or solely civil service based. This expert make-up would be a key part in establishing the credibility of the Commission.

The Commission would have a core role in supporting Government here in NI, perhaps lifting the burden from an Executive in making prioritised, strategic and in many cases long term decisions in determining infrastructure strategy. Inherent in its support role is the need to challenge and hold up a mirror to Government to help assess how Government is doing in its role of underpinning and delivering on infrastructure priorities. This could be a credible way of providing much needed focus for projects which are necessary but can sometimes be overlooked.

## Water

NI Water is today an efficient organisation that provides high-quality water and wastewater services for all of society. They pride themselves in their planning and have long-term vision as to how to effectively plan water infrastructure for NI.

Water and drainage infrastructure is different from many other aspects of infrastructure in that at its core it provides to society a basic human right to clean safe drinking water every day. At a macro level, investment in water and drainage infrastructure is key to underpinning an economy which is capable of growth and expansion.

However, the current funding model and decisions around how a constrained funding envelope in the block grant is allocated too easily pushes out to the next generation the decision to invest in this vital infrastructure today. The "invisible" nature of the infrastructure renders it too tempting to decision makers to allocate funding to it at the end of an allocation process instead of at the opening stages of such processes.

An independent Infrastructure Commission can support government in reaching the necessary allocations of investment at the right point in the process.

## Consultee: CPCNI

### Role and make-up of an Infrastructure Commission

A future Infrastructure Commission needs to be cross-party, led by the NI Executive. It requires a fresh approach, a diverse commission is vital to ensure the decision making process is inclusive and robust and able to cater for the needs of all of society. It must be accountable and transparent in its decision-making. Learn from what didn't work previously. The Commission should provide vision, direction and commitment. with a focus on sustainability, well-being of the population and inclusivity. It should take an outcome based approach which translates into benefits for NI. It was also suggested that there needs to be a culture change in decision making, value as a concept needs to be established. Decisions around infrastructure need should not be solely political and financial.

One of the initial roles of a Commission would be to address how NI looks in the future. and so they can be a mechanism to deliver what the vision needs to be over the next 20 years with an overall view of accountability to the public, who are the shareholders for plans. The Commission also needs independence to work successfully whilst also having political buy-in.

There was recognition from CPC that COVID has caused a shift in priorities as well as Brexit and net zero which need to be factored in. Regarding Brexit, CPC expressed that there is an opportunity for a free trade area in NI. An Infrastructure Commission can help to address how NI can benefit from Brexit and take these to the Executive.

### Long-term versus short-term

Overall a Commission would need to have a carefully monitored short-term remit, but with the intention and potential for it to move in to the long-term depending on its success. The make-up of the Commission also needs to be diverse and inclusive to ensure robust decision making.

### Engagement with society

The Commission also needs to engage with the public through wide stakeholder engagement and marketing to understand what the public want and more importantly what they need then this can be fed into projects to be successful. There will need to balance what the public want and what society needs.

### Best practices

Infrastructure needs also must be identified and NI needs to review how infrastructure is measured in terms of capital spending rather than on a needs basis as well as capturing the wider benefits. For instance, developing Conswater Greenway enabled other businesses to be established in the surrounding area creating jobs, its use benefits the health of the local population which in turn translates to benefits for the NHS. Typically these benefits and the wider public dividend are not included in the decision making process to proceed with an infrastructure scheme. An Infrastructure Commission can help to assess what is really needed in NI going right through to education and skills.

When learning from other countries it also needs to be realised that NI is different so there need to be specifics and a tailoring of a Commission to NI.

### Other issues

CPC suggested other issues which need to be addressed such as wastage in procurement, the Infrastructure Commission would need to address where it sits in procurement and planning.

## Consultee: Engineers Ireland

### Role and make-up of an Infrastructure Commission

Engineers Ireland suggest that an Infrastructure Commission could support integrated decision making in NI as well as strategic planning across all sectors with a reflection on how previous plans were maintained.

Any future Infrastructure Commission needs to have a climate change theme considered as well as taking account of NI's political and economic position. Examples of projects that worked well in other places need to be applied here with local knowledge and understanding. To support the Commission should be made up of experts from NI instead of outsourcing these individuals.

An Infrastructure Commission could have a mentoring, advisory and accountability role. However, learning from SIB it lost its way and did take on too much of an advisory role as it didn't have the power to deliver projects. An Infrastructure Commission needs to be independent, have a mandate and its management needs to be external of the public sector along with long-term plan to hold the NI Executive to account.

Individuals who will work on the Commission need to do so on a full-time basis, Engineers Ireland suggested that those who worked on the Commission part-time would find difficulty in delivering projects.

The Commission also needs to be progressive and help to close the gap between GB and NI which Engineers Ireland suggest is increasing.

If the Commission were unable to sit within the NI Executive it could sit within this Department for Infrastructure, whilst this wouldn't be the ideal place, it would be a good starting point and better than the Commission not being set up at all. It could also start small and then widen as it progresses.

### Funding

Regarding funding, the Scottish Government have shown creativity for funding infrastructure such as borrowing which is then offset by future costs. In NI local authorities don't have this flexibility and so there is a continual look towards Westminster for funding when other avenues are available.

### Climate change

Engineers Ireland suggested that the policies on climate change need to be updated in NI as well as the speed of planning, they gave the example of John Lewis, suggesting that this is off-putting for investors.

An Infrastructure Commission would also need to note the all island economy when developing infrastructure and overall the Commission could act as a catalyst for the future.

## Consultee: Invest Northern Ireland

### Role and make-up of an Infrastructure Commission

INI suggest that an Infrastructure Commission could provide overarching leadership to bring different aspects of infrastructure together which usually act alone such as energy, telecoms, air and housing for instance. Net zero, community inclusion and competitiveness all work together and so these need to be planned for and developed in a holistic way. There also needs to be a regional focus as there are opportunities outside of Belfast to ensure inclusion.

Infrastructure is vitally important to FDI and investors need to know they are getting something which is world class. Therefore, a Commission needs to address how NI is seen from the outside looking in and help to create a seamless approach to which investors are dealt with. The example of investors in Boston was given where there was a single point of contact for all queries, the same one-stop approach needs to occur here to make it easy for investors.

Any future Commission needs to be agreed at Executive level to give it primacy, it was expressed that departmental engagement would be ineffective for this because each department has their own strategy and priorities. The Commission would need to have cross party and cross departmental support to allow for absolute clarity of focus along with a credible leader and team who are prepared to make tough choices which are put forward clearly. Independence and a long-term vision are also key as politicians are always seeking re-election and so they are focused on short term goals.

### Climate change

Regrading climate change, currently there is no legislation in place and so businesses can't plan effectively, net zero is going to be a commitment going forward and there needs to be a focusing on 'greening' the economy which can play a part in the post-COVID-19 recovery. There needs to be focus on energy and resource efficiency and how to develop the circular economy in NI, this will help not only the environment but also to ensure businesses are competitive.

### Engagement with society

An Infrastructure Commission should engage with the NI community and ensure inclusion, often FDI does not trickle down to a community level. Therefore, this Commission would need to have the responsibility for a regionally balanced economy with a realisation that economic development can't work in silos.

INI spoke about how to engage society and suggested using social media tools with an engagement campaign to provide clear messages and understandable, good choices to the public whilst always respecting the public.

### Wastewater

Wastewater treatment is an area of weak development in NI, where there is not the capacity for waste to support future capital investment, holding NI back. Opportunities do exist such as using waste wind power to multiply efficiency of wastewater treatment and leapfrog NI in to a hydrogen economy. An Infrastructure Commission could lead on projects such as this but require independence to do so with decisions based on economics and science rather than politics.

INI provided this resources for additional information : [Improving productivity through efficient resource management](#)

### Other issues

INI suggest that working from home will continue and this creates new opportunities to react strategically and give the business community an opportunity to lead. COVID-19 and Brexit are still ongoing issues and so it needs to be about how we make the most out of these.

## **Consultee: Mineral Products Association Northern Ireland**

### **Role and make-up of an Infrastructure Commission**

MPANI expressed concerns as to how a new Commissioner could add value to the existing structure with the role of SIB and CPD. MPANI commented on the size of SIB when it was formed, 15 - 20 people with a clear role in advice to the NI Executive to now where they have 115 staff and CPD are similar. Therefore, it needs to be assured that there is no duplication, a new Commission could take on this role, MPANI previously made a recommendation that there should be centralised unit.

The Commission would also need to be independent, made up of private sector experts which would give external stakeholder confidence. The Commission should sit in the remit of the NI Executive and not a specific department, where they can deal with multiple targets under one management. MPANI suggest that an individual should be brought in from outside NI who has experience to lead the Commission such as from Scotland or Australia. This individual should be given a timescale to come up with recommendations and then in 2-3 years there is an independent review to assess where the Commission is operating. MPANI referred the CBI Review of Planning whose Commissioner has made radical suggestions this approach, MPANI suggest is valuable and useful. There also needs to be a clear link between infrastructure and planning like in Scotland and in a strategic planning policy statement.

### **Long-term versus short-term**

MPANI mention the NI Audit Office which outlines previously some major issues in to the delivery of projects which need to be addressed such as the process on infrastructure, budgets, time scale and the political structures at play. To ensure that a Commission would not turn in to an 'empire' MPANI suggest that it would need to provide a report every 5 years on the successes and progress.

### **Best practices**

MPANI suggest that infrastructure needs a 3-5 year budget cycle as this delivers better value for money, giving the example of apprentices who see a pipeline of work and funding towards achieving a goal in the future. MPANI gave the example of New Zealand who have assessed their overall infrastructure system which NI could do to cut down on waste and address exactly what is needed.

### **Water**

MPANI suggest that NI water needs addressed immediately and this resource critical for everything else from tourism, infrastructure and City Deals. There also needs to be a focus on net zero which a Commission could help to do. They also mentioned the impact of COVID-19 and the potential for more people to be working from home and so this will impact transport hub, York Street, digital infrastructure which all need addressed if circumstances remain particularly in the medium-long term.

### **Brexit**

Meanwhile Brexit poses a challenge as to funding for their industry in which a lot in infrastructure was delivered here through EIB, so they question if that funding will be made available here. MPANI want decisions to be made and referred to the recovery plan they presented to the Minister in June, they want decisions made in order to prevent any negative impacts by 2021 which would see significant redundancies in the construction industry potentially.

## Consultee: Ofcom

### Role and make-up of an Infrastructure Commission

Ofcom were supportive of establishing an Infrastructure Commission in NI expressing that it would be beneficial to have an organisation looking at things from a cross-cutting, birds eye view. Ofcom expressed the view that there are many interdependencies between different infrastructure projects that could be aligned, and Ofcom encouraged the Panel to include to digital infrastructure as part of the Commission's remit.

### Planning structure in NI

Ofcom suggested that the current planning structure in NI could cause commercial money to flow elsewhere in the UK, where planning for mobile infrastructure under permitted development isn't as restricted as in NI. The current planning legislation in NI could make it more difficult for mobile operators to fulfil their obligations as part of the Shared Rural Network (SRN) which includes binding coverage targets. Overall planning is potentially something that an Infrastructure Commission could look at and take the politics out of it. Planning, health concerns and community opposition for instance all need to be addressed to get a better solution for improved mobile coverage. A Commission would need to take a long-term view and be fairly unconstrained whilst working very closely with industry.

### Digital connectivity in NI

In terms of broadband coverage, NI is currently in a relatively good place, mobile coverage too but it did take longer to catch up from the initial roll-out of 3G. NI is well ahead of the UK in its full fibre coverage, but it is likely that gap will close in the coming years. Ofcom understand that broadband availability is unequal, and NI also has a higher proportion of premises that cannot access broadband speeds of more than 10Mbps. This is a challenge given the rural distribution of the population. There are particular issues in the Fermanagh & Omagh, Newry, Mourne and Down and Mid Ulster districts who suffer poor broadband and mobile coverage. COVID has highlighted the need for strong connectivity and digital infrastructure. Ofcom agreed that greater connectivity could bring environmental benefits from changed work patterns and increased machine-to-machine technology.

### Best practices

In regard to the National Infrastructure Commission and the Infrastructure Commission for Scotland, Ofcom had offered working groups and seminars to help the Commissioners' understanding of telecoms regulation. That would be something they would like to offer in NI if it came to fruition, so there is an understanding of principles and how they apply to NI, and how they can be subtly but crucially different to the rest of UK.

### Other issues

Ofcom noted greater sharing of telecoms infrastructure, for example access to existing ducts and telegraph poles, and hoped for greater sharing of infrastructure between telecoms and utility networks. It is worth looking into how operators and regulators operate to support future plans. Ofcom noted its close working relationship with the Department for the Economy, given their telecoms brief, and hoped for a joined-up approach across relevant departments to support improved connectivity in the future.

## **Consultee: Openreach**

### **Role and make-up of an Infrastructure Commission**

Openreach suggest that any potential Commission could learn from SIB and questions whether a new Commission would replace SIB or work collaboratively. It was suggested that SIB focus more on skills and individuals resulting in the context that they were meant to deliver in being lost. Openreach expressed concern at the already lack of joined up working for instance from central to local government and so there is a siloed approach for each touch point in departments. There should be a focus on what government and private sector are doing and how these could be done best to attract FDI.

When asked about the independence of new Commission, Openreach question whether any organisation is every fully independent. For the Commission to be successful it would need to be from an established body rather than one focused solely on independence.

### **Digital connectivity in NI**

There also needs to be good recognition of the positive work going on in NI, for instance currently NI has full fibre coverage of nearly 60% versus the UK at 15% and this recognition needs to be maximised for the benefit of NI PLC. This position of NI in terms of full fibre access sets NI apart especially due to the volume of people now working from home. Openreach think it is possible to have 100% coverage by 2025.

There is also the opportunity to develop digital skills particularly for old people and to encourage a transition from legacy to new technology which will require joining up investment pots.

### **Planning structure in NI**

There is also the challenge of planning which needs to be addressed and in particular the growth of new homes and developments all of which are built without broadband access which is left to the service provider, particularly challenging are rural homes with long lanes/driveways. Council currently do not have the legislative powers to compel developers to address connectivity concerns to their proposed sites, which may change with planned legislation in Westminster, but Councils could be more vocal with developers that connectivity is critical to them to support applications.

## **Consultee: Queen's University Belfast- Environmental Planning**

### **Role and make-up of an Infrastructure Commission**

Professor Geraint Ellis is the Chair of Environmental Planning at QUB and welcomes the initiative to set up an Infrastructure Commission. Professor Ellis suggests that it is important to have an independent and evidence-based voice. Currently the views of the climate emergency are not being addressed.

Any Commission would also need to go across different departments in order to deliver a regional strategy, the example of the Regional Development Strategy, specified in the Belfast Agreement highlighted. It would be problematic if the Commission could not cover energy or digitisation, which are currently not covered by the Department of Infrastructure.

### **Planning structure in NI**

Infrastructure planning needs to be viewed with a long-time frame (20 - 30 years), yet current governance arrangements means it is acting on much shorter horizons, and therefore not delivering what it could for NI. It is very important that an Infrastructure Commission would need to address where it sits with existing planning bodies; it should not overrule the local development plan system, which is where planning should get the credibility from local democracy, but we could image the Commission setting a long time framework through which these plans could operate. The Commission would need to address how it complements what is currently in place, but there is certainly a place for it.

Prof Ellis is not an expert on infrastructure procurement but would see the strategic planning function as being by far the most valuable function the Commission could deliver.

Overall a Commission could be an expert-led planning advisor, acting as an independent voice to review or evaluate government's infrastructure performance as well as hold government to account. The Commission would need to be independent and long-term, focussed on strategic issues and addressing previous issues of uneven development across the region.

### **Engagement with society**

Professor Ellis suggested that it would be a mistake to establish a body that takes legitimacy from public engagement; this must be the realm of elected representatives. Rather it should be seen as having its authority based on expertise, evidence, independence and strategic perspective, which are issues not often well served by representative democracy. The Infrastructure Commission should be independent, but any investment decisions ultimately made by government and this accountable to the people.

While it is important to try not to take power away from NI Executive, NI does currently have poor foresight capacity, made worse by increasing populist politics, and the Commission should be seen as addressing this particular issue, which is clearly detrimental to long term thinking and investment. In this respect, the Commission should place a particular emphasis on delivering infrastructure that adapts and mitigates for climate change – clearly it also needs to deliver social and economic goals, but these are often well voiced in the current institutions of governance.

## **Republic of Ireland's National and Economic Social Council**

Prof Ellis drew on his experience as an independent member of the National Economic and Social Council in the Republic of Ireland, which advises the Taoiseach on long term strategic issues (see <https://www.nesc.ie/>). This is an interesting example of an expert driven body, which also reflects a wide range of social, economic and environmental stakeholders (including agriculture, trade unions, and independent experts) that is able to reach consensus on critical issues facing the country (e.g. it has recently addressed climate change governance, the welfare system, transport orientated development and COVID-19 issues).

## **North-South relationship**

To be successful we have to realise that we live in same ecological and economic unit as the South and therefore many aspects of infrastructure will have to be developed on an all island basis, while others may have to have an east-west basis, or potentially beyond this, for example some marine relationships with France or Scandinavia.

## **Best practices**

NI could learn from the New Zealand models as it features an independent and strategic vision. Currently NI is spending lots of money to meet short term demand for instance building roads to meet demand for next five years, where it might not be there in 20 years, while fundamentally undermining climate change objectives.

## **Brexit**

Brexit can clearly not be ignored but may end up being a relatively short-term issues compared to many of the issues a Commission may consider. Here, the infrastructure that is needed to underpin sound environmental governance may be an important component to any future trade agreements or interface with the EUs Single Market.

## Consultee: Translink

### Role and make-up of an Infrastructure Commission

Translink were supportive of an Infrastructure Commission as it could provide long-term planning with a focus next generation infrastructure for NI, it may also be beneficial in assisting with the COVID-19 recovery setting out a clear plan for 'shovel ready projects'.

Translink also suggested that there may need to be a wider education about the role of infrastructure and its importance as when people know more about the role of infrastructure, they have a renewed appreciation.

An Infrastructure Commission could help to provide leadership and focus on this area and tackle difficult and large-scale projects which the NI Executive currently don't have time for. Translink suggested that an Infrastructure Commission would need to be strategically located with Civil Service and political buy-in, they mentioned how the Civil Service and the Commission would interact would be important for its success.

The role of the Commission could be to hold plans to account, ensure projects are for all of society. Its implementation would help to ensure a levelling up across the UK and NI which may help to get additional funding, this aspect may help to gain political buy-in. Translink also suggested that there was an overreliance on the block grant and a Commission would help to show that NI is being proactive and serious about its future investments.

The speed at which projects come to fruition in NI was mentioned and this is something that needs addressed.

### Funding

Translink suggested that unfortunately when it comes to the budget allocation infrastructure does not get priority like health and education do and so often industry actors feel that they are at the back of the queue causing frustration. However, the importance of infrastructure should not be overlooked as good quality infrastructure helps to support the labour market, therefore infrastructure needs to be thought of more strategically and as a priority like in Scotland, Ireland and Westminster.

### Climate change

There should also be a priority basis around net zero carbon which can help to make projects necessary. Translink highlighted that the UK Treasury Green Book does not take account of net zero and therefore they suggest that future economic models need to have a holistic approach with a focus on the social and environmental impacts, with future plans toughly measured and scrutinised.

## Consultee: Northern Ireland Electricity Networks

### Role and make-up of an Infrastructure Commission

A long-term focus on infrastructure is badly needed in NI and NIE Networks fully support the establishment of an Infrastructure Commission. Infrastructure is critical to a well functioning and sustainable economy and society. NI needs modern infrastructure on a par with the rest of the UK and Europe otherwise the region will be left behind. NIE Networks suggest that a Commission should have a major focus on long-term infrastructure needs, prioritisation and strategy, with perhaps some oversight of a small number of very strategic projects where appropriate. The overall model should allow NI to prepare for the future with a particular focus on successfully decarbonising the economy over the next 30 years and aligning climate action and economic development as the overall goal.

The Commission does need to be depoliticised and to achieve this it needs to be set up independently and report to the NI Executive and not to an individual minister due to the political and short-term nature of those roles. The Commission at the UK level shows where this has worked and how they can hold government to account whilst being independent. As well as holding government to account, the Commission should also hold planning, regulatory and delivery organisations to account. It should have oversight of and hold to account all aspects of the infrastructure delivery chain.

The core of the Commission should be physical infrastructure across NI, focussed on the key areas of energy, transport/roads, water/waster water, digital etc. It could also have a role in relation to housing development, which is very dependent on all the supporting utilities and infrastructure networks. There is probably a less clear case for including areas such as health and education as, while infrastructure support these and enable their delivery, there are much bigger policy issues involved. The primary focus should be infrastructure.

Giving this remit to the Strategic Investment Board might be an option but it feels quite different to their existing remit which appears to be more about supporting public sector delivery rather than setting out a long-term infrastructure vision for all of NI. The step change is so big that a new body would be better suited.

### Best practices

NIE Networks believe that Scotland has moved ahead of NI and other UK nations at aligning economic and infrastructure development with the goal of net zero. Aligning these two objectives makes sense as well as delivering for society and what they need. The Scottish model is therefore a very suitable comparator to consider.

The Republic of Ireland is certainly ahead of NI on climate action, but broader infrastructure planning remains heavily in the political domain and therefore not fully independent.

The New Zealand model also looks appropriate and one to consider in terms of best practice review.

### The impact of COVID-19

Going forward COVID-19 has created a new uncertainty which is something that the Commission needs to take it to account. There is now an opportunity for greater regional rebalancing as more people may choose to work from home so there may be greater dispersal of the population and a move away from urbanisation creating new demands on infrastructure. There may be less growth in urban areas, but it is too soon to say for definite what the trend swill be in this respect. The economic impact of COVID-19 also creates the need to urgently stimulate the economy and infrastructure delivery can play a key role in that, as part of a 'green recovery'.

## Net zero carbon

Integration of infrastructure is required to meet the low carbon model and interdependencies are become much stronger, for instance you can't look at decarbonising transport without considering energy infrastructure, and both have a dependency on digital. There are huge interdependencies across sectors which need to be addressed, the current model is very siloed which is not effective.

Political leadership is required on climate change however so that the Commission is not operating in a vacuum and to ensure that all sectors are aiming towards a common goal. Government needs to set the overall goal and reflect that in a Climate Change Act. A Commission could then provide the knowledge and expertise to determine the infrastructure needs to achieve that goal, integrated across the different sectors and government.

While the terms of reference of the Ministerial Advisory Panel provide that its scope will reflect the "hard" infrastructure that falls within the remit of the Department for Infrastructure, NIE Networks believes that it is essential that energy and digital infrastructure are also included within the scope of any Infrastructure Commission. Otherwise it will be ineffective and miss the opportunity to provide integrated long term infrastructure planning that is so badly needed.

## Consultee: Alice Charles, World Economic Forum

### Is an Infrastructure Commission the right solution for NI?

It was suggested that NI is perhaps not ready to decide on whether an Infrastructure Commission is the best option, as more research needs to be done to understand what the optimum solutions are for the local context. There needs to be focus on setting up the right enabling environment. The challenges that NI faces in terms of limited utilisation of technology in the design, procurement, delivery and operation of infrastructure and slow and inefficient planning permission system was highlighted. The opportunity to leverage digital twin technology was highlighted, in order to digitise land use planning and the opportunity to leverage algorithmic zoning to take politics out of land use planning, thus ensuring a strategic and sustainable approach is taken.

At present what is in progress is simply replicating what has been done in Scotland, which is not suitable for direct replication in NI, without having considered the unique local context.

It was flagged that PPPs are not necessarily the best instrument to deliver infrastructure. They tend to take an extensive period of time and the industry is renowned for 'low balling' in terms of price and have access to experienced legal expertise, who can insert legal loop holes that enable the contractor to seek additional funds post signing of the contract. The National Children's Hospital in Dublin was cited as an example of a mega infrastructure project with significant cost over runs, which highlights the need to legal expertise to assist government delivery.

Due to NI's small size it was suggested that infrastructure needs to be addressed on an all island basis if economically viable infrastructure is to be delivered. It was suggested that a transboundary approach needs to be adopted to the deliver of infrastructure. For instance, the Dublin-Belfast M1 motorway and dual carriageway has been delivered as two separate projects and on the northern side this poses road safety and capacity challenges – this roadway should have been delivered as one transboundary infrastructure project. It was highlighted that most development on the island of Ireland will occur on the Dublin Belfast corridor, which will require strong connections between the two cities. The need for a high speed rail link between the two cities was flagged and this should be considered as one infrastructure project. However, NI presents political risk which does put investors off. There is also the East-West dimension that needs to be considered, particularly in relation to connections between Belfast and London. Overall NI is competing with the South who will attract investment first so NI needs to address how it can be part of their pipeline of projects.

Any future Infrastructure Commission also needs to be realistic as there is a lack of institutional capacity in NI, and issues to consider include how would the Commission work with local authorities. Unfortunately, it was felt that there are weak local authorities in NI apart from Belfast which can make infrastructure projects difficult, it was suggested that steps such as directly elected mayors could ensure more effective local authorities.

### Political risk too great in NI

Transparency needs to be a key factor as there is also huge corruption risk associated with infrastructure projects, which combined with political risk puts investors off. Therefore, transparency and dispute resolution mechanisms need to be built in from the beginning. Project Eagle was cited as an example that provides a negative reputation for NI. It was expressed that the political risk of doing business in NI is continuing to deter investors. Other issues also continue to be off-putting such as fewer direct flights to NI and so internationalisation of the airports is needed. To remove political risk, NI needs to develop a long terms vision for Infrastructure (at least a 50-year plan), which is bought into by all political parties. This will provide NI with a costed pipeline of projects and with cross party buy in, it would get rid of political risk.

## Engagement with society

The MAP needs to consider how a Commission would engage with civil society, academia, the community and business. It was flagged that where there is a failure to engage civil society, academia, the community and business early on, innovation is not leveraged, and citizen concerns are not factored in.

## Best practices

Australia and Canada are the G20 countries that are the best at designing, procuring, delivering and operating infrastructure. In relation to Canada, the Ministry for Infrastructure & Communities Smart City Challenge was highlighted as best practice. The Ministry launched the Smart Cities Challenge to promote forward looking innovative thinking to address various challenges that cities and communities are facing in Canada and how technology could be used as an enabler to solve these challenges. This enabled villages, town and cities to develop a new vision for their community and enter a competition to potentially secure some funds to deliver this vision. If a village, town or city did not win they still any additional sources of funding and Canada's Ministry for Finance doubled its infrastructure spend and also established Canada's Infrastructure Bank. It was considered that the UK will need an infrastructure bank, particularly as it no longer will have access to the European Investment Bank post Brexit. Investors will not invest in risky infrastructure projects, so these types of projects will require government support. If NI needs to borrow through the markets for infrastructure projects, it will be important to consider the debt to GDP ratio and the ability to borrow without impacting the credit rating. Now is the opportune time to borrow for infrastructure investment as interest rates are low and infrastructure investment will provide a vital stimulus. It was recommended to speak to the G20's Global Infrastructure Hub, which is led by Marie Lam Frendo.

## Funding

Overall, it was suggested that NI is not ready to decide on whether an Infrastructure Commission is the best option, as more background work is needed. It was also pointed out that the Ministry of Infrastructure and Finance need to be closely working together to develop and cost and finance a pipeline of projects. There also needs to be a clear understanding of the ability to borrow in order to fund infrastructure, there need to be plans for retrofitting aged infrastructure, climate and resilience infrastructure, social infrastructure and digital infrastructure, as well as a vision for every village, town and city to provide a whole NI vision which will allow for effective planning and organisation of finances. The private sector, civil society and academia needs to be engaged in this process early on.