Infrastructure
Commission
for Scotland

Scottish Government Thematic Round Table Report

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October - November 2019

Summary

During October and November, the Infrastructure Commission for Scotland (the Commission) secretariat facilitated a series of group discussion sessions with officials from a range of Scottish Government Departments. The sessions sought to explore emerging themes from the Commission's wider engagement, address any evidence gaps, and discuss key areas of interest.

Based on the evidence gathered to date by the Commission, each session explored a core set of themes:

a.   Cross-sectoral interdependencies & collaboration

b.   Regulation & planning approaches

c.   Appraisal approaches

d.   Making the most of our existing assets

e.   Resilience

The five sessions were grouped as follows:

1.   Economic Infrastructure

2.   Public Services Infrastructure

3.   Inclusive Economic Growth and National Performance Framework

4.   Blue & Green Infrastructure, Biodiversity and Climate Change

5.   Data and Digital Infrastructure

A summary of the points made by the Scottish Government officials in each session is below.

1. **ECONOMIC INFRASTRUCTURE**

a. **Cross-sectoral interdependencies & collaboration**

> Policy collaboration is already done well in the Scottish Government. There is a programme structure within the Scottish Government that supports a collaborative approach to major cross-cutting issues. For example, the Global Climate Emergency Programme Board, which ensures all portfolios are contributing measures that address climate change.

> The Energy Strategy (as an example) set out a whole systems approach to encourage consideration of multiple aims. In support of this Strategy, Transport Scotland and electricity network companies hope to accelerate investment in electric vehicles and charging infrastructure by creating a partnership with the same objectives to enable investment in the same projects. The Michelin Innovation Parc is another good example of bringing together public sector partners with commercial expertise of companies.

> The Place Principle approach has been adopted by the Scottish Government and is the basis for delivery of housing. Developments at Granton and Winchburgh are good examples of strategic partners working collaboratively.

b. **Regulation & planning approaches**

> For Digital infrastructure, Telecoms regulation is wholly reserved and scope to influence is limited. Changes could be made to encourage more collaboration between the regulated utility providers, e.g. in energy and digital, but there is currently no regulatory push to encourage that kind of collaboration.

> The Scottish Government is keen to encourage the engagement of utilities at the earliest stages of any development to consider strategic issues such as transport, drainage and application of existing guidance. This is the 'infrastructure first' approach.

> On Energy Efficiency, regulations are being used to signal a change years in advance, which is helping to set expectations and to drive a cultural change. And the Scottish Government has proposed a requirement that local authorities prepare Local Heat and Energy Efficiency Plans to help facilitate investment.

c. **Appraisal approaches**

> A new approach to prioritisation is being developed in the Scottish Government. This will enable infrastructure teams to work together to consider the impact on long term outcomes such as net zero carbon and inclusive economic growth.

> Developing and adopting a new framework is complex. In the short term, the Scottish Government aims to make progress through taking decisions on low regret options, although sequencing of those decisions and developing a thorough understanding of the opportunity costs will be important.

> Transport Scotland has good appraisal processes for incremental changes to the transport network, which influence travel demand, but there is a recognition that future behaviours may be influenced more by technology changes which are more difficult to predict. Transport Scotland use a scenario approach as one method of managing this – details of this can be found at https://www.transport.gov.scot/publication/scenario-planning-process-report/

d. **Making the most of our existing assets**

> Understanding the nature of our assets is essential and decisions on investment should relate to managing overall risk to provision across the piece. When we understand our assets better it enables better planning for investment.

> Fixing what appears to be broken is not always appropriate and consideration of asset lifespan is important as higher costs and inefficiencies emerge when investment is reactive.

e. **Resilience**

> The group explored Scotland's reliance on international digital connections, including an over-reliance on London for international/internet connectivity. Commercial decisions will be an important factor in ensuring digital resilience,

> mitigating the associated risks are not solely the responsibility of government.

> In the future, Scotland is expected to increase its overall electricity demand through increased demand for electric vehicles and electrical heating. To ensure a resilient electricity supply, there is a need to have a more sophisticated grid management system that includes demand side management (including cabling, substations, storage and international connections) that will help move energy to be in the right place when it's needed and to take account of seasonal and daily peaks in demand. The Energy Strategy took a scenarios based approach to understanding the challenges of the future energy system.

2.   PUBLIC SERVICES INFRASTRUCTURE

a.   Cross-sectoral interdependencies & collaboration

> Policy collaboration is thought to be improving, with new projects being chosen because of their cross-sectoral appeal. This is apparent in the new Learning Estate Strategy, for example.

> This approach is supported by all levels of government thinking more strategically about what can better service communities and develop local economic benefits. Opportunities for multi-purpose assets and co-location are being actively pursued.

> The Place Principle offers an opportunity to focus on collaboration in individual locations or regions. For example, college campuses are increasingly community-based which can help towards achieving multiple outcomes.

b.   Regulation & planning approaches

> In many cases regulation and planning are done by local authorities or public bodies and Scottish Government involvement is at a reasonably strategic level rather than direct involvement.

> There were discussions around who sets regulation. For some portfolios, regulation and planning process are reserved by UK Government which can add extra challenges when considering Scotland's long-term outcomes.

c.   Appraisal approaches

> Within the group, there is an appetite for improving the strategic approach to appraising and prioritising investments. The group agreed that there was a need for a strong communication strategy to allow for a new approach to prioritisation – recognising the Commission will play a role in establishing a new approach.

> As well as considering inclusive economic growth, net zero carbon and place, when appraising if building new or maintaining investment in existing infrastructure is most viable, portfolios need to consider broader trends, such as demographic changes and political uncertainty.

d.   Making the most out of our existing assets

> There seemed to be a consensus that investment in maintenance and new resources is at a transition point; with maintenance historically not having been prioritised above new-build, resulting in higher costs associated with replacing assets that are now beyond repair.

> However, maintaining old assets is not necessarily the best option. In reality, in many (rural) areas schools, fire stations, and health infrastructure are no longer in the right locations due to changes communities and demographic trends. And existing facilities cannot always meet current and increasing demands to deliver inclusive economic growth, net zero carbon and place outcomes.

e.   Resilience

> National frameworks and resources (such as National Planning Framework and SEPA Flood Maps) should be utilised when resilience planning and identifying risks for public services.

3. INCLUSIVE ECONOMIC GROWTH AND NATIONAL PERFORMANCE FRAMEWORK

> The Scottish Government published Scotland's Wellbeing Report earlier this year – first time reporting on national outcomes in the National Performance Framework – and have been working to increase understanding of 'wellbeing' as a multifaceted issue that goes beyond the traditional use of 'health & wellbeing'. Inclusive economic growth can be seen as a subset of wellbeing economy.

> The National Performance Framework will be developed further into a wellbeing framework. We will use the performance framework to provide focus on strategic priorities and to embed an outcomes-focussed approach. New Zealand's wellbeing budget has connected budgets to outcomes.

> The Scottish Government recognises the need to be more transparent and open about how infrastructure decisions are made. Developing a better understanding of the causes and effects within infrastructure planning and delivery will be important in the move to an outcomes focussed approach.

> Need to understand primary drivers of infrastructure from across government portfolios to help inform policy actions (i.e. understanding what solutions look like on regional geographies and considering how we value the difference actions can make at a regional level – taking account of bottom up views is important).

4. GREEN & BLUE INFRASTRUCTURE, BIODIVERSITY AND CLIMATE CHANGE

a. Cross-sectoral interdependencies & collaboration

> Scotland has huge potential in green & blue infrastructure, and we already recognise the transformative power of green/blue infrastructure to create better places. There are examples where both adaptation and mitigation can go hand in hand, these should be prioritised.

> Scotland's population profile is changing, with the shift to the East / North East and an ageing population in rural areas. Investing in natural capital could offer opportunities to offer jobs to sustain communities in rural areas – Forestry could be a growth sector in South West Scotland, for example.

> Infrastructure should use regenerative design principles to ensure interventions do not harm the natural environment.

> A holistic consideration of land uses is vital to ensure we meet our long term outcomes - allowing multiple uses of land to co-exist and be strategically managed. Existing Community Planning Partnerships, the adoption of the Place Principle and the approach being taken under National Planning Framework provides a good opportunity to achieve better outcomes for land use.

b. Regulation & planning approaches

> Transformative change is required to deliver our emissions reduction targets, and infrastructure must be at the very centre of delivering net zero carbon.

> We cannot guarantee now what is the best course of action in terms of infrastructure needs and development and reaching climate change goals. However, we need to make the best-informed approach to our infrastructure investments, given the tools available, being aware that nothing is zero risk.

> One of the biggest challenges for the Scottish economy is achieving a Just Transition and securing the mix of private and public investment in a fair and equitable way.

c. Appraisal Approaches

> Green & blue infrastructure should be considered alongside grey/economic infrastructure too. Nature Based solutions can be (economically) productive as well as purely environmental. There are already opportunities for investment options in this space and commercial returns are already happening.

> Valuing environmental impacts is challenging - carbon targets are more easily factored in to decision-making but biodiversity is very difficult to value. Using Natural Capital Accounting tools, we can consider the multiple benefits of natural assets – in terms of contributing to net zero carbon targets but also economic and social benefits too.

d. Making the most of our existing assets

> Protecting and enhancing existing infrastructure rather than running it down is often better value for money and supports predictable spending rather than peaks and troughs.

> Our public bodies (e.g. Scottish Water) can act as exemplars in terms of stewardship of the natural environment. There is considerable innovation in water delivery – Scottish Water is looking for decentralised solutions to replace older assets in areas where population is becoming less dense. However, there are costs associated with the change.

e. Resilience

> The Scottish Government has recently published the second Adaptation Programme, bringing together the full scope of activity towards climate resilience, including Flooding and Housing - https://www.gov.scot/publications/climate-ready-scotland-second-scottish-climate-change-adaptation-programme-2019-2024/

5. DATA AND DIGITAL INFRASTRUCTURE

a. Cross-sectoral interdependencies & collaboration

> There is a huge amount of potential synergy between digital and data infrastructure and other forms of infrastructure such as energy and transport, but there are (largely regulatory) barriers that can be difficult to overcome.

> Much of the future investment in traditional forms of infrastructure is likely to require an investment in digital and data alongside it in order to use assets effectively. The way we invest in connectivity is to make sure digital underpins national infrastructure in all forms.

> Developing digital infrastructure has a huge number of benefits across Scotland – not only in terms of public service delivery, but also in terms of the employment and flexible working and the use of and engagement with public services.

b. Regulation and planning approaches

> Aligning regulatory drivers across infrastructure types and between UK and Scottish Governments, would help enable industry to work in a more systematic and cohesive way.

> Data standards are critical – not only ensures quality of data, but also facilitates better data sharing and reduce the costs of implementing digital systems.

c. Appraisal approaches

> Policy and planning across Government needs to consider how to keep pace of change with advances in data and digital technology. Digital and data investment is as much about standards, systems and operating platforms as it is about cables and masts.

> Investment in digital connectivity and digital infrastructure needs to be considered at the outset, alongside other commitments and priorities of the Scottish Government.

d.   Making the most of existing assets

> There are significant opportunities for Scotland in terms of developing economic value of green datacentres and data hosting due to our natural resources and approach to renewable energy innovation. Examples of this include Microsoft underwater datacentre near Orkney. This can attract international investment.

> Skills and employment are key elements of inclusive economic growth. There are opportunities in digital growth, attracting transition from other industries. Better digitalisation and IT services can change certain job roles, for example automating some administrative roles can free up some roles and put staff in more front-line roles and can transition services and employment.

> Better use of data, IT services and growing digital infrastructure can change the way the Scottish Government plans and delivers services. Much of this is still done in silo in portfolios whereas we want to get to an integrated and shared approach. This is critical to the delivery of efficient public services and the ability of the Scottish public sector to respond flexibly to changes in powers and demand. This is why digital and data should be regarded as part of the critical national infrastructure of the country.

e.   Resilience

> Digital and data is part of the critical national infrastructure of Scotland. It is essential for the delivery of vital public services and the efficient operation of commerce.

> There was a consensus of opinion that fundamental changes in the way public sector operates, in terms of its data and digital capabilities will help to future proof digital infrastructure. This includes strategic investment in digital infrastructure, skills, internal infrastructure and teams and expertise

> It is challenging to anticipate what increasing capabilities and platforms will be required in the future. We know data use will increase dramatically over the next 30 years+ but we don't know what the net impact of an increase in data use will be.