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THE HIGHLANDS AND ISLANDS TRANSPORT PARTNERSHIP

Report to Partnership Meeting 26th April 2024

Scottish National Adaptation Plan

Purpose of Report

This report introduces HITRANS response to the public consultation on the draft Scottish National Adaptation Plan (2024-2029) which sets out the Scottish Government's draft plan for adapting to climate change.

Background

A copy of the draft Scottish National Adaptation Plan (2024-2029) can be found at this link https://www.gov.scot/publications/public-consultation-scottish-national-adaptation-plan-2024-2029/. The draft Action Plan which was published on 31st January 2024 sets out the Scottish Government's draft plan for adapting to climate change over the next 5 years and is a response to the third Climate Change Risk Assessment (CCRA3) that outlined 61 risks and opportunities from climate change.

The draft Adaptation Plan is structured around five Outcomes, setting out the case for adaptation action for:
1. Nature connects,
2. Communities,
3. Public services and infrastructure,
4. Economy, business and industry, and
5. International action.

Each of these five outcomes comes with its own set of objectives. In total, these 22 objectives define how the Scottish Government will measure delivery of adaptation action across the Plan with a series of policies relating to each objective.

HITRANS Consultation response

The consultation encourages responses to all questions but we have restricted our response to the elements of the consultation most relevant to HITRANS i.e those that relate to the Objective for the *Transport System* under Outcome 3 – Public Services and Infrastructure and the Island Impact Assessment. An extract of the key policy proposals relating to the *Transport System* under Outcome 3 is provided on the following pages.

Extract from SNAP:
Objective: Transport system (PS4)
The transport system is prepared for current and future impacts of climate change and is safe for all users, reliable for everyday journeys and resilient to weather-related disruption.

Scotland's transport infrastructure and networks are fundamental to our nation's communities, businesses and visitors. They offer critical connections between people and places, and are vital in providing access to essential services, such as healthcare. Transport also enables us to access the building blocks of health and wellbeing including education, employment, services, social contact and resources – the things we need in our lives to give us the best chance of being healthy. The importance of our transport systems cannot be overstated, particularly as they are susceptible to variations in Scotland's weather systems.

Our road, rail, maritime and aviation transport networks are all facing unprecedented vulnerability to the weather-related impacts of climate change, which can contribute to the deterioration of assets, disruption to networks, and potentially hazardous incidents that may cause fatalities or serious injuries. These impacts have serious knock-on consequences across sectors, places and wider infrastructure systems that depend on transport infrastructure for their normal functioning.

By increasing the climate resilience and ability of transport infrastructure to adapt to climate change, we will have a significant influence on Scotland's overall ability to increase resilience and adapt.

Transport Scotland has an ambitious vision for a well-adapted transport system in Scotland which is safe, reliable and resilient in relation to the current and future impacts of climate change. This is set out in its 2023 Approach to Climate Change Adaptation & Resilience (ACCAR) which includes actions for trunk road, rail, aviation and maritime networks.

Transport Scotland will:
- *Embed adaptation and resilience across the Transport Scotland functions through its 2023 Approach to Climate Change Adaptation and Resilience, an internal governance structure for the ACCAR and an appropriate leadership board.*
- *Continue to share knowledge on climate change adaptation and resilience with transport peers and across sectors at a local, national and international scale.*
- *Build the resilience and availability of active travel routes associated with the transport networks noted below, for example those adjacent to roads and canals and on shared pathways.*

Trunk Roads
Policies and actions in this section aim to deliver the ACCAR outcome: "Trunk roads which are well adapted and resilient to the current, projected and unexpected impacts of climate change."

Transport Scotland will:
- *Develop and publish a Trunk Roads Adaptation Plan by 2025, based on the most up to date climate change projections (UKCP18) and climate vulnerability and risk assessments building on previous studies undertaken.*
- *Continue to collaborate with Trunk Road Operating Companies to build network resilience to extreme weather and other climate risks, strengthening contract requirements, where appropriate and building on the work of our Vulnerable Locations Groups.*
- *Develop a Biodiversity Strategy for the agency by 2025, which will consider how improving biodiversity can support adaptation and resilience on Trunk Roads (e.g. slope stabilisation).*

Trunk Road Operating Companies will:

- *Continue to manage disruption risk using Transport Scotland's internal Manual for the Management of the Risk of Unplanned Network Disruption provides requirements for Operating Companies (OCs), including the preparation and administration of a Disruption Risk Management Plan (DRMP).*
- *Regularly review and update high wind, flood and landslide management plans, signed off by Transport Scotland.*
- *Continue to engage and collaborate with Transport Scotland on Trunk Road adaptation and resilience, delivering schemes that address issues at vulnerable locations and developing innovative solutions.*

Rail Network

Policies and actions in this section aim to deliver the ACCAR outcome: "Supporting the delivery of climate change adaptation and resilience for Scotland's Rail network"

Scottish Government will:

- *Ensure the High Level Output Specification for Control Period 7 contains up-to-date requirements relating to climate change, including adaptation and resilience.*
- *Engage with our rail stakeholders and support the development of future specifications and policies that deliver adaptation and improve resilience on Scotland's rail network.*
- *Scotland's railway infrastructure is managed by Network Rail, including the delivery of major infrastructure projects and general maintenance. In collaboration with ScotRail, both organisations have developed a joint Climate Ready Plan for Scotland's Railway covering the period 2024 to 2029. This plan has four key intended outcomes:*
- *The decisions they make are based on a maturing understanding of weather and climate data. This includes improvements to climate risk assessment processes and better integration of climate projection data into decision making processes.*
- *A long-term climate adaptation and resilience strategy increasingly guides investment. This includes development of adaptation pathways that set out an approach to dealing with climate-related risks at the most vulnerable locations.*
- *Their assets are made increasingly resilient to acute weather events, as well as longer-term, more chronic changes in climate. This includes delivery of a programme of asset interventions were enhanced weather and climate resilience is achieved.*
- *They are creating a culture of transparent and competent weather and climate resilience decision making. This includes development of training and routes to competence for staff, and that a robust risk and assurance process underpins decision making.*

Detailed delivery plans underpinning these outcomes will be published in 2024.

In addition to the Climate Ready Plan, Network Rail will:

- *Continue to deliver actions plans associated with recommendations made by the Weather Risk Taskforce - including improved earthworks failure reporting, increased site investigations and improved drainage strategy.*

Aviation Network

Aviation is a reserved matter and Scotland's main airports are commercial businesses with their own governance arrangements. Actions in this section are focussed where we have most influence and aim to deliver the ACCAR outcome: Engaging with aviation stakeholders to support their decision making in relation to climate change adaptation and resilience.

Highlands and Islands Airports Limited (HIAL) manages and operates 11 regional airports on behalf of the Scottish Ministers. The airports serve some of Scotland's rural and island communities providing a lifeline service to individuals, communities and businesses across the Highlands and Islands. It is essential that HIAL ensures its operations, infrastructure and strategic functions are resilient to climate variability and change.

- *In 2023 HIAL completed a Climate Change Adaptation Report and climate vulnerability and risk assessment of its operations, infrastructure, and strategic functions.*
- *The identified risks were incorporated into HIAL's existing risk management process to allow on-going management, furthermore specific climate risks will be reviewed every two years to ensure that risk scoring and mitigation remains accurate and appropriate.*
- *Based on this work, a range of actions are planned to monitor flood, coastal erosion and high temperature risk to ensure there is no significant disruption to services.*

Maritime Network

Policies and actions in this section aim to deliver the ACCAR outcome: Contributing to safeguarding lifeline ferry services, ports, harbours and canals in response to the threat of climate change.

Transport Scotland maritime responsibility covers legislation, policy, guidance and services relating to Scotland's ferries, and will:
- *promote awareness of climate science and collaborate on proactive adaptation and resilience interventions and opportunities.*
- *actively engage with ferry operators, providing information and guidance where appropriate, on services and infrastructure projects through a variety of working and advisory groups.*

Lifeline Ferries – Vessels and Ports

Scottish Ministers have responsibility for the provision of lifeline Ferry Service on the Clyde and Hebrides and Northern Isles Networks. This includes ownership of vessels and many of the ports that underpin those networks through its asset owning company (Caledonian Maritime Assets Limited – CMAL) as well as working with third party owners where port facilities are vital to delivering these services.

Ministers are committed to mitigating and adapting to the impact of climate change to ensure that ferry services remain resilient through a series of measures related to vessels and port infrastructure. This includes:
- *Investment in remote weather monitoring equipment in both CMAL and Non-CMAL owned ports to enable better information to be available to vessel master's to inform decisions around committing to sailings.*
- *Taking account of sea conditions in relation to hull form and vessel power in relation to the provision of new tonnage for the fleets.*
- *Consideration of the impact of climate change in relation to the design of replacement or upgrading of port facilities on the lifeline network to ensure safe berthing and operations.*
- *Scottish Minsters are preparing an Islands Connectivity Plan (ICP) that is also an opportunity to reinforce some of these principles.*

HITRANS Consultation Response

5. What action(s) do you think the Scottish Government should prioritise in order to build greater resilience to the impacts of climate change?

The actions within the draft SNAP relate to only those elements of the transport network and services for which the Scottish Government has responsibility. If we are to ensure that we build greater resilience in the transport network to the impacts of climate change, then the final SNAP needs to include actions which will support all aspects of the transport network and services. For example, The Highland Council is responsible for maintaining 6780km of road network. This is almost double the length of the entire trunk road network (3507km). Similarly, our response to Q33 highlights the elements of the transport network on islands (the same applies to much of the rest of the Highlands and Islands) where the transport network and services are directly provided, maintained or supported by Local Authorities.

HITRANS has been updating our Regional Transport Strategy over the last 12 months and through consultation with our partner Local Authorities, it is clear that each faces severe challenges to maintain resilient transport networks against a backdrop of increased climate related impact and pressure on both capital and revenue budgets. We would welcome further engagement so that the full impacts of adapting to climate change on the transport network can be considered in finalising SNAP.

Prioritisation should be given to those elements of the transport network where disruption has the most significant impact on local users. In many parts of the HITRANS region a closure to a particular road can have impacts across all aspects of not just adjacent communities but often large elements of the entire region. For example, closures on specific points of the A82 and A83 can have a huge impact on large areas of the West Highland economy, with diversions adding sometimes over 100 miles to journeys or when it occurs at particular locations there are no alternative routes at all. This winter in Argyll, four roads were closed by landslides or damaged bridges for over a month after unprecedented rainstorms. Where the A816 was closed at Ardfern, as a result of a major landslip, more than 6000 tonnes of debris had to be removed and a local diversion constructed, with school kids having to be taken by boat for part of their journey to and from school in order to bypass the closure.

Climate change is increasingly impacting on rail's performance and reliability. During periods of high winds and heavy rainfall, trains may be slowed, or not run at all due to : rivers rising to dangerous levels (eg Dalguise, Gynack); concern about the stability of earthworks (eg. Oban line); trees falling on the line (ubiquitous) ; snow too deep to permit points from operating (eg. Carrbridge); high tides combined with on-shore winds leading to over-topping of sea defences (eg. Portgower, Kintradwell); landslides (eg. Cruachan, Lochailort); rock incursion (Stromeferry, Brander); raised levels in inland lochs (eg. Loch Watten); stranded trains remote from public road access for evacuation (eg. Corrour, Altnabreac); faster defoliation leading to poor adhesion (eg. Culloden, Dunrobin, Beasdale). Conversely, risk of lineside fire due to excessive drought conditions can lead to cancellation of steam charter services (eg. Mallaig line).

The recent statement by Government to accelerate action on climate to achieve Net Zero by 2045 is welcome and to succeed in this ambition requires a concerted effort from all stakeholders. There should be a collaborative approach taken by national and local government with a clear role for regional approaches to interventions and delivery that recognises how transport networks work. HITRANS would welcome the opportunity to

work with Scottish Government, Transport Scotland and our local government partners to support delivery of climate action and adaptation in the Highlands and Islands.

12. Climate change makes extreme weather more likely in Scotland. When weather events disrupt one part of our infrastructure (e.g. energy, telecoms, transport networks), the impacts can quickly "cascade" out to disrupt other infrastructure networks or vital services. For example, an interruption in electricity will quickly affect businesses, hospitals and transport. Would an assessment of "cascading" risks from weather-related disruptions to infrastructure help you or your organisation to adapt?
Y / N. Please share your reasons:
Yes. There is an opportunity for public bodies, agencies, transport operators and other providers to improve the coordination of response to weather events. The creation of Traffic Scotland has led to a significant improvement of information provision and messaging around weather events and other disruption but predominantly in relation to those elements of the network which are the responsibility of the Scottish Government. However, the general public often isn't aware of which body is responsible for operating and maintaining a specific part of the network or service and the majority of journeys usually involve assets managed by more than one provider. Information provided needs to reflect this and should be available on a single portal or website so that users can access the most up to date information quickly and easily.

The increased instances of impacts from weather related events means it is imperative for this to be addressed given the severe social and economic impacts that disruption causes especially where the impacts are to lifeline elements of the transport network. Below are a number of potential measures which could be implemented to improve the response of both public bodies and operators:
- **Transport users should be able to access information on transport services and network from one portal. Information on disruption on the local road network (eg. traffic cams, road closures, accidents) should be available on Traffic Scotland in addition to that currently held on the trunk road network.**
- **Investment in more Variable Message Signs on the Strategic (trunk and Regionally significant local road network) to help keep road users informed.**
- **Exploration of more infrastructure to vehicle solutions to help keep all transport network users informed in real-time of incident and disruption.**
- **Review of response to major weather events to ensure that blanket closures are avoided where available information indicates that different regions or routes can continue to operate as normal. We recognise the challenges in providing consistent and clear messaging and it is vital to ensure that the public continue to respond by taking appropriate action to important messaging. Recent blanket closures to the rail network have resulted in extended closures to the network in the Highlands where reopening requires a helicopter to check the line is safe before it can be reopened. Increased investment in vegetation clearance in close proximity to the line could both help reduce this risk and improve the quality of the journey experience by improving the views from the rail line for passengers on routes which are marketed for their scenic value.**

31. What, if any, impacts do you think the Adaptation Plan will have on Island communities?

It is disappointing that the Stage 2 element of the ICIA that involves evidence gathering does not contain a single document produced by any Local Authority. There are a number of such documents and strategies which would have helped inform the impact of the

Adaptation Plan on island communities not least Local Authority Climate Change Strategies (eg. Western Isles Climate Change Strategy 2022-2027 https://cne-siar.gov.uk/wp-content/uploads/2023/12/cnes_climate_change_strategy_2022-27.pdf)

The average cost of implementing climate adaptation measures on islands is higher than that for an equivalent project on the mainland. This is a result of a variety of measures including the cost of importing materials and additional time to deliver projects as a result of implementing around ferry timetables. The lack of access to local materials and skills means that more goods and services need to be brought onto the island to deliver projects than has been the case in the past with the reduction in plant and the centralisation of particular services to regional centres where there would previously have been on island provision.

The geology and topography of many islands is another factor which can place increased pressure on the delivery of services than would be the case for mainland locations. i.e cemeteries on many islands are located near of adjacent to the coast as that is where the only suitable land is available. The result is that many are experiencing encroachment with this challenge exacerbated by the impacts from coastal erosion as a result of increasing sea levels and prevalence of winter storms.

32. What, if any, measures could be taken to strengthen any positive impacts or lessen any negative impacts in this respect?

As the scope of the SNAP only considers those transport networks for which the Scottish Government is responsible for its relevance to the islands is limited to a small number of airports and those ferry networks and ports which are included within either the Clyde and Hebrides or Northern Isles Ferries Networks. Both Orkney and Shetland Island Councils operate extensive inter island ferry networks. While both Highland and Argyll and Bute also operate a number of routes within their areas. In addition, important connectivity is provided by other commercially operated services to Orkney and Cowal.

Local Authorities are the sole roads authority on all of Scotlands Islands (with the exception of the A87 through Skye). They are responsible for maintaining the road networks and supporting structures which include multiple causeways. They are also responsible for operating and maintaining a large number of ports and harbours. Local Authorities also operate and maintain several airfields such as to the outer islands of Orkney and to Coll and Colonsay.

Consideration of the impacts on these networks which often offer lifeline connectivity to communities on islands is essential to strengthening any positive impacts which may be derived from the Adaptation Plan. Both HITRANS and partner Local Authorities can provide extensive examples of how the preservation of the lifeline transport networks and services on which island communities rely on are facing increasing technical and budgetary challenges in maintaining them against the impacts of climate change.

As the report outlines Scotland's Local Authorities have have updated their Flood Risk Management Plans with the Scottish Government and CoSLA agreeing an annual budget for mitigation in flood risk areas for the next decade. However, the metric for awarding funding make it challenging for projects in rural and island locations to be successful.

<u>RISK REGISTER</u>

<u>RTS Delivery</u>

Impact - Positive

Comment – The policies outlined in these key policy document complement those set out in the draft Regional Transport Strategy. However, as highlighted in our response to the consultation, the finalised SNAP should consider the impacts of climate change on all aspects of our transport network.

<u>Policy</u>

Impact - Positive

Comment – Strategy Objective 6 in the updated RTS is "To improve the efficiency, safety and resilience of our transport networks for people and freight and adapt to the impacts of climate change." The RTS includes a number of policies that support measures that help address this overarching objective.

<u>Financial</u>

Impact – Neutral

Budget line and value – No direct impact

<u>Equality</u>

Impact – Positive

Comment – Our response highlights the need for the final SNAP to more fully consider the impacts of and measures required to adapt to climate change in rural and island communities

Members are invited to:
1. Note the Report

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Date: 23rd April 2024