

Ynys Môn

THE ISLE OF Anglesey

Topic Paper 5: Transport



Prepared in support of the Wylfa
Newydd Project: Supplementary
Planning Guidance

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1 Introduction

1.1 Purpose of this Topic Paper

1.1.1 The purpose of this topic paper is to bring together the evidence base and policy context in relation to transport to inform the updating of the Wylfa Newydd Supplementary Planning Guidance (Wylfa Newydd SPG). It is one of 11 topic papers that have been prepared to support the:

- Identification of the key matters to be considered in drafting the revised SPG;
- Provision of guidance with respect to how the revised SPG could respond to the challenges and opportunities identified; and
- To offer further information to the public in support of consultation on the draft revised SPG.

1.1.2 **Box 1.1** provides a full list of topic papers being prepared in support of the Wylfa Newydd SPG.

Box 1.1	Topic Papers Prepared in Support of the Wylfa Newydd SPG
	Topic Paper 1: Natural Environment
	Topic Paper 2: Historic Environment
	Topic Paper 3: Housing
	Topic Paper 4: Economic Development
	Topic Paper 5: Transport
	Topic Paper 6: Amenity
	Topic Paper 7: Climate Change
	Topic Paper 8: Infrastructure
	Topic Paper 9: Waste
	Topic Paper 10: Population and Community
	Topic Paper 11: North Anglesey

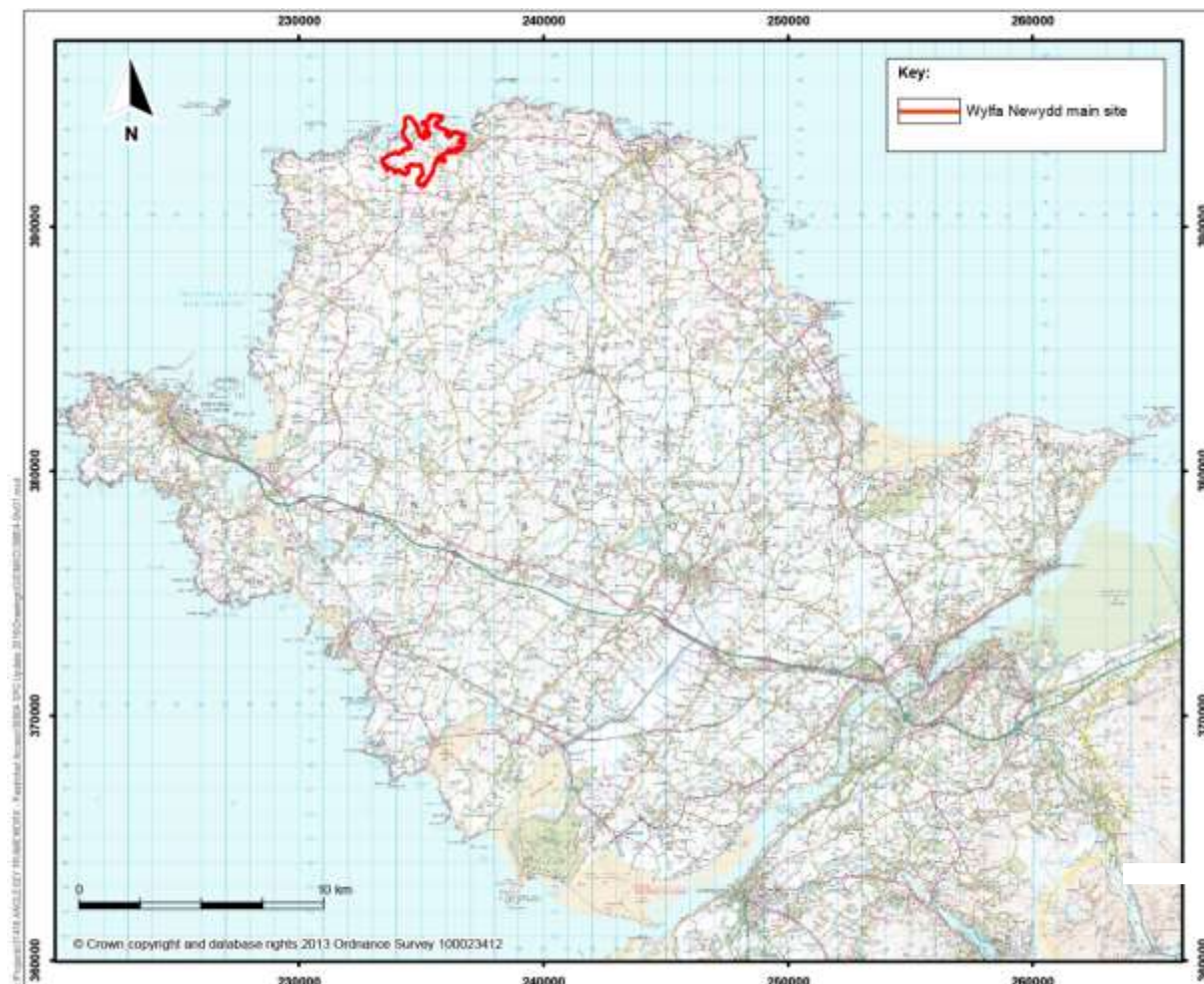
1.1.3 Ten topic papers were originally issued to support the SPG when it was first published by Isle of Anglesey County Council (the County Council) in 2014. Since that time the Anglesey and Gwynedd Joint Local Development Plan (JLDP) has been adopted which has required the topic papers to be updated in line with extant local planning policy including the drafting of an additional topic paper as indicated in **Box 1.1** above.

1.2 Context

Wylfa Newydd

1.2.1 Wylfa has been identified by the UK Government in the National Policy Statement (NPS) for Nuclear Power Generation (EN-6) as a possible site for a new nuclear power station (see Part 4 and Annex C of the NPS). Horizon Nuclear Power (Horizon) plans to deliver two Advanced Boiling Water Reactors (ABWRs), generating a minimum of 2,700MW, on the Wylfa Newydd main site. The Wylfa site is approximately 300 hectare (ha) in size and it is located beside the existing Magnox nuclear power plant (which ceased electricity generation in December 2015). The project will also include associated development both on the Wylfa Newydd site and at various other off-site locations (see **Figure 1.1**).

Figure 1.1 Location of the Wylfa Newydd Main Site



1.2.2 Construction of the new nuclear power station is a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. Legislation provides that projects like the Wylfa Newydd are of such potential importance to the UK that a

different consenting process to the “normal” grant of planning permission by the local planning authority applies. Under this process, Horizon (the project promoter) proposes to submit an application for a Development Consent Order (DCO) for the power station to the Secretary of State for Business, Energy and Industrial Strategy (Secretary of State). The application will be made through the Planning Inspectorate who, following examination, will recommend to the Secretary of State whether development consent should be granted or not. The final decision on whether to grant or refuse development consent rests with the Secretary of State¹.

- 1.2.3 Although the County Council is not the consenting authority for the NSIP, it will seek to ensure that development has regard to the strategic policies and principles of the Development Plan (JLDP), the relevant NPSs, national (Wales) planning policy and guidance, and relevant Supplementary Planning Guidance. The JLDP is the spatial plan that gives effect to, *inter alia*, the Anglesey Economic Regeneration Strategy and the Energy Island Programme (EIP).
- 1.2.4 In addition to the proposed power station, Horizon will bring forward other projects directly related to Wylfa Newydd. These include off-site power station facilities and other facilities and works connected with the development (associated developments). In accordance with the NPS (para 2.3.4), associated development may be proposed at the main site, or may relate to works on land located off the main site. Associated development applications are now covered by the Planning Act 2008 in Wales and can, therefore, also be determined through the DCO process. Separately, third parties may bring forward development proposals indirectly related to the project. These might include, for example, sites for housing that will be occupied by construction workers. These development proposals would require consent under the Town and Country Planning Act (TCPA).
- 1.2.5 Since the previous version of this Topic Paper, Horizon has refined the likely off-site power station facilities and associated development required as part of the Wylfa Newydd Project. It has undertaken three stages of pre-application consultation (in 2014, 2016 and 2017) relating to the proposals and, in the third of these stages (PAC 3), it presented a series of preferred options. The off-site power station facilities are now proposed on one site in Llanfaethlu and the associated development is likely to include:
- Site preparation, clearance and enabling works for the new power station (within the Wylfa Newydd main site);
 - Marine Off-Loading Facility (MOLF), breakwaters and Holyhead Deep, a deepwater disposal site for inert construction material;

¹ Further information on the DCO application process is available via the Planning Inspectorate’s website: <http://infrastructure.planningportal.gov.uk/application-process/the-process/>.

- Off-line Highway improvements in four sections along the A5025;
- Temporary Freight Logistics Centre at Parc Cybi;
- Temporary Park and Ride Facility at Dalar Hir; and
- Temporary accommodation for the construction workforce on the Site Campus (within the Wylfa Newydd main site).

1.2.6 In addition to the above associated development (that form part of the DCO application), Horizon also proposes to submit TCPA applications for site preparation and clearance works and for on-line improvements to the A5025. In this context, reference to the Wylfa Newydd Project in this document includes the proposed power station and other development on the Wylfa Newydd main site and also the off-site power station facilities and associated development proposals, including the TCPA applications. However, the Wylfa Newydd Project does not include the North Wales Connection Project (NWCP), which will connect Wylfa Newydd to the electricity transmission infrastructure (i.e. the National Grid). The NWCP is also an NSIP. It is being promoted by National Grid and will be subject to a separate DCO application process.

1.2.7 The term ‘project promoter’ relates to both Horizon and any other third parties proposing development in direct response to Wylfa Newydd (for example, the provision of construction worker accommodation or related employment uses).

Wylfa Newydd Supplementary Planning Guidance

1.2.8 Supplementary Planning Guidance is a means of setting out detailed thematic or site-specific guidance on the way in which development plan policies will be applied in particular circumstances or areas. The purpose of the Wylfa Newydd Supplementary Planning Guidance (Wylfa Newydd SPG) is to provide supplementary advice on important local direct or indirect matters and to set out the County Council’s response to national and local policy and strategies in the context of the Wylfa Newydd Project. The SPG is supplemental to the recently adopted JLDP.

1.2.9 The Wylfa Newydd SPG is intended to:

- Inform the position which will be adopted by the County Council in its Local Impact Report² and relevant sections of the Statement of Common Ground³;

² As part of the Planning Act 2008 process, the County Council will be invited to submit a Local Impact Report giving details of the likely impact of the proposed Wylfa Newydd Project on Anglesey. Further information on the preparation of local impact reports is available via the Planning Inspectorate’s website: <http://infrastructure.planningportal.gov.uk/wp-content/uploads/2013/04/Advice-note-1v2.pdf>.

³ A statement of common ground is a written statement prepared jointly by the applicant and another party or parties such as the County Council, setting out any matters on which they agree. Statements of common ground help focus on the examination on the material differences between the main parties.

- Provide a planning framework (alongside the JLDP and other planning policy guidance) that helps guide the applicant(s) and influences the design and development of the Wylfa Newydd Project elements to ensure sustainable outcomes, with a focus on associated development;
- Inform pre-application discussions related to the main site, off-site and associated developments;
- Offer supplementary local level guidance, consistent with the relevant NPSs, which the Planning Inspectorate and the Secretary of State may consider both important and relevant to the decision-making process; and
- Form a material consideration in the assessment of any Wylfa Newydd Project related TCPA applications submitted by Horizon or other development promoters and businesses who may have, or wish to pursue, an interest in the project.

1.3 Transport Overview

1.2.7 The SPG needs to cover all modes of travel and transport relevant to the development of Wylfa Newydd, including:

- The potential for personal travel to the site by these various modes together with direct and indirect effects arising from their use:
 - Foot;
 - Bicycle (non-powered two wheeler);
 - Powered two wheeler;
 - Personal Car;
 - Taxi or private hire;
 - Buses, coach and other private hire large capacity transport;
 - Rail access;
 - Sea / boat access; and
 - Air.
- Freight access to the site by various modes together with direct and indirect effects arising from their use:
 - Road - goods vehicles;
 - Rail – freight trains;
 - Sea – container shipments; and

- Air.
 - Abnormal Indivisible Load (AIL) access.
- 1.2.8 Each of these various modes and options should be considered, explicitly or implicitly, within the policy guidance.
- 1.2.9 As noted above, transport cannot be considered in isolation as it has the potential to give rise to significant impacts upon people's quality of life. It needs to be considered holistically in combination with a series of other factors:
- Environmental Impact – there are local effects such as air quality, noise, severance, all of which can have significant impacts on people's lives;
 - Safety – minimising the likelihood of road accidents is a key issue for all transport proposals;
 - Security – transport also has an impact on how safe we feel; trying to strike a balance between activity and inactivity is a key issue; and
 - Health and Physical Fitness – the provision of realistic alternatives to the private car can generally promote levels of physical exercise (walking and cycling as an example) raising levels of physical fitness.
- 1.2.10 Transport can have impacts upon more global factors, including:
- Global Warming – transport is a major contributor of Greenhouse gases;
 - Social accessibility – access to services (hospital, doctors, shops etc.);
 - Air Quality – transport is a major contributor of pollutants to the atmosphere.
- 1.2.11 It is generally considered that there is a need to reduce travel and transport to a minimum to address these issues. This, however, needs to be balanced against the need to enhance economic activity, for which transport is a key driver. A balance therefore needs to be struck between the promotion of economic activity and the negative impact of increased levels of traffic.
- 1.2.12 This topic paper covers transport aspects in relation to the Wylfa Newydd.

1.4 Structure of this Topic Paper

- 1.2.13 The remainder of this topic paper is structured as follows:
- **Section 2:** Identifies the key messages relative to transport arising from a review of international/European, UK, national, regional and local legislation, strategies/policies and guidance;

- **Section 3:** Presents the baseline information about transport in the Anglesey area, drawing on the evidence base;
- **Section 4:** Identifies the key matters related to transport to be addressed by the Wylfa Newydd SPG and considers how the SPG could respond to each.

2 Policy Content

2.1 Introduction

2.1.1 The Wylfa Newydd SPG will influence, and will be influenced by, other plans and programmes at an international/ European, national, regional and local level. This section of the topic paper identifies the plans and programmes most relevant to transport in the context of the Wylfa Newydd Project and distils the key policy messages that will need to be reflected in the SPG.

2.2 International/European Plans and Programmes

UNFCCC, the Kyoto Protocol (1997) and Doha Amendment (2012)

2.2.1 The global nature of climate change means that much of the framework for action is set at an international level. The United Nations Framework Convention on Climate Change (UNFCCC) is an international treaty with the aim of cooperative action to limit global temperature increases. 195 countries, including the UK, have joined the Convention since its inception in 1992. Those party to the Convention have agreed to take climate change into account in such matters as, transport, energy, industry natural resources and where activities involve coastal regions. The Parties also agree to develop national programmes to slow climate change.

2.2.2 The Kyoto Protocol set legally binding targets for 37 industrialised countries and the European Community for reducing greenhouse gas emissions. These targets equate to an average of 5% reductions relative to 1990 levels over the five-year period 2008-2012, while the UK target was a 12.5% reduction. In December 2012, the Doha Amendment was adopted. This provided a set of new commitments through until December 2020.

2.2.3 Transport is a major source of greenhouse gas emissions. Around a quarter of domestic CO₂ and other greenhouse gas emissions in the UK come from transport. Reducing greenhouse gases from transport will play a key role in meeting the Kyoto Protocol and Doha Amendment targets.

European Commission – White Paper on Transport 2011

2.2.4 At a European level, transport has the second biggest greenhouse gas emissions behind energy. More than two thirds of transport-related greenhouse gas emissions are from road transport. However, there are also significant emissions from the aviation and maritime sectors and these sectors are experiencing the fastest growth in emissions,

meaning that policies to reduce greenhouse gas emissions are required for a range of transport modes.

2.2.5 The European Commission adopted a roadmap of 40 initiatives for the next decade to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment. At the same time, the initiatives will dramatically reduce Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050.

2.2.6 By 2050, key goals will include:

- 40% use of **sustainable** low carbon fuels in aviation; at least 40% cut in shipping emission;
- A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport;
- No more **conventionally**-fuelled cars in cities;
- All of which will **contribute** to a 60% cut in transport emissions by the middle of the century.

2.3 UK Plans and Programmes

Overarching National Policy Statement for Energy EN-1 (2011)

2.3.1 This National Policy Statement (NPS) sets out the criteria by which applications for nationally significant energy infrastructure projects will be determined and the recommended focus of analysis of the accompanying Environmental Statement. Under the heading of Traffic and Transport it provides advice on appropriate assessment methodology, requiring that an ES should include a transport assessment using NATA/WebTAG (WelTAG in Wales) or successor methodology. It also requires the applicant to consult with the Highways Agency and Highways Authorities and where appropriate provide a Travel Plan which should outline proposed measures to improve access by public transport, walking and cycling and to reduce the need for parking associated with the development.

2.3.2 Mitigation measures may include the transportation of people and goods by water-borne or rail transport. The NPS states that this form of transport is preferred over road transport at all stages of the project where cost-effective.

2.3.3 Advice is also provided as to the likely requirements to be attached to a consent where there are likely to be substantial HGV numbers generated.

National Policy Statement for Nuclear Power Generation EN-6 (2011)

- 2.3.4 EN-6 sets out specific considerations in relation to nuclear power. It flags for local consideration, the potential for impacts upon motorways, major highways, airports and ports requiring that developers should not have an unacceptable impact upon such infrastructure.
- 2.3.5 With regard to Wylfa Newydd, Volume II of the NPS makes no specific reference to the issue of traffic and transportation.

2.4 National (Wales) Plans and Programmes

Wales Spatial Plan (2008)

- 2.4.1 The Wales Spatial Plan was updated to be in keeping with the One Wales: One Planet principles in 2008 and provides the context and direction of travel for local development plans and the work of local service boards. The key themes of the update are:
- Building sustainable **communities**;
 - Promoting a sustainable **economy**;
 - Valuing our **environment**;
 - Achieving sustainable **accessibility**; and
 - Respecting **distinctiveness**.
- 2.4.2 With regard to sustainable accessibility the Plan provides support for reducing the need to travel by co-locating jobs, housing and services, for instance, and for changing behaviour in favour of ‘greener’ modes of travel, such as car sharing, public transport, walking and cycling.
- 2.4.3 For the North West Wales region, which includes Anglesey, the Plan recognises that the then recent investment in the A55 corridor provides an opportunity to spread prosperity, including benefits from the buoyant economies of the North East Wales and West Cheshire sub-region. It also notes the links with Ireland through the Port of Holyhead and the Trans European Network which are considered to be important. Integration of transport strategy and implementation between England Wales and the Republic of Ireland is seen as crucial.

Planning Policy Wales 9th Edition (2016)

2.4.4 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It includes a range of policy guidance that relates to Transport and Travel.

2.4.5 Paragraph 8.1.14 states that land-use planning can help to achieve the Welsh Government's objectives for transport through:

- Reducing the need to travel, especially by private car, by locating development where there is good access by public transport, walking and cycling;
- Locating development near other related uses to encourage multi-purpose trips and reduce the length of journeys;
- Improving accessibility by walking, cycling and public transport;
- Ensuring that transport is accessible to all, taking into account the needs of disabled and other less mobile people;
- Promoting walking and cycling;
- Supporting the provision of high quality public transport;
- Supporting traffic management measures;
- Promoting sustainable travel options in rural areas;
- Supporting necessary infrastructure improvements; and
- Ensuring that, as far as possible, transport infrastructure does not contribute to land take, urban sprawl or neighbourhood severance.

Technical Advice Note (TAN) 18 Transport (2007)

2.4.6 The document provides advice on how the planning system should support reductions in the need to travel through the siting of major travel generating uses (such as housing) in accessible locations. Such allocations should be accessible to jobs, shops and services by modes other than the private car. The TAN therefore provides criteria on how accessible housing developments can be achieved. Other developments having major travel generating uses are considered to include employment, education, shopping and leisure and the TAN states that these should also be placed in locations which offer genuine and easy access by a range of transport modes. The TAN also supports the use of maximum parking standards and promotes walking, cycling and the greater use of public transport. It also states that encouragement should be given to the development of new forms of park and ride schemes. It emphasises that 'park and share' sites where car users can meet and leave cars, continuing the journey in a shared

vehicle, is another example where sustainability benefits are gained through reducing single occupancy journeys.

Wales Transport Strategy 2008

- 2.4.7 The Wales Transport Strategy: One Wales – Connecting the Nation was published in 2008 and is a key tool in developing an effective transport strategy for Wales. The strategy outlines how the transport policy approach is more responsive in its delivery of WG’s wider policy agenda, and attempts to be flexible in reflecting different regional circumstances.
- 2.4.8 The four main regions in Wales are represented by a regional transport consortium which has been created through partnerships between neighbouring local authorities. Taith is the regional transport partnership that represents the six local authorities in North Wales: Anglesey, Conwy, Denbighshire, Flintshire, Gwynedd and Wrexham.
- 2.4.9 The stated goal of the Wales Transport Strategy is to promote sustainable transport networks that safeguard the environment while strengthening the economic and social life of the nation. The transport strategy identifies a series of high-level outcomes and sets out the steps to their delivery. The long-term outcomes have been grouped and key priorities identified as follows:
- Reducing greenhouse gas emissions and other environmental impacts;
 - Integrating local transport;
 - Improving access between key settlements and sites;
 - Enhancing international connectivity;
 - Increasing safety and security.

The Wales Freight Strategy (May 2008)

- 2.4.10 The Strategy sets out high-level aims and policies for freight transport, and identifies a series of ‘steps’ towards their delivery. A high priority is placed on freight transport playing its part in ensuring a sustainable environment. Many of the 49 steps set out in the strategy contain elements that are aimed at reducing the overall environmental impact of freight transport, through modal shift or efficiency measures, in particular the contribution of freight transport to greenhouse gas emissions:
- The Strategy sets out how it will respond to the three principles set out within the Wales Transport Strategy;
 - Minimising the demand on the transport system: reduce overall demand for freight transport movements;

- More sustainable and healthy forms of travel: encourage freight to switch from road to rail and sea;
- Make maximum use of existing infrastructure: efficient use of networks by each mode and inter-modal.

Wales Rail Planning Assessment

2.4.11 The document is complementary to the Transport Strategy and it looks at the potential growth in rail usage up to 2026 and what might be done to meet this growth. It notes that the railway in Wales encompasses around 1,400 kilometres of railway and over 200 stations and that there are a number of ports in Wales such as Holyhead, where rail passenger and freight facilities can play an important role in port access. At the time it was published (2008), the assessment identified where services provided access to ports (services running to Holyhead and Fishguard Harbour linking with ferry services, and to Milford Haven and Pembroke docks). The service to Holyhead no longer runs. The document also recognises the rail link to RAF valley and the commencement of commercial flights in 2007 between Valley and Cardiff International Airport.

2.4.12 A number of objectives are identified. These comprise:

- Develop rail as part of an integrated transport network;
- Facilitate multi-modal access to and from the railway;
- Remove psychological barriers to rail use including providing up to date information on services and facilities;
- Improve physical access at stations and on trains;
- Tackle crowding and provide a more integrated and accessible service;
- Ensure major developments have access to the rail network;
- Ensure railway assets are appropriately retained;
- Improve performance of rail services and provide greater operational flexibility;
- Stimulate modal shift to rail;
- Reduce the environmental impacts of rail travel; and
- Enhance the overall rail experience.

2.4.13 The Wales Freight Working Group Report dated April 2016 gives four recommendations in order to achieve these objectives:

- Welsh Government to commission an up to date, integrated analysis of opportunities and challenges for growing intermodal freight networks and out of town hubs in Wales, taking as long-term a view as evidence supports;
- Welsh Government should consider the need for appropriate loading gauge capability along the entire south Wales main line to efficiently accommodate intermodal container traffic. Welsh Government should continue to lobby the UK Government to ensure the appropriate works are undertaken during electrification of the Great Western main line;
- Welsh Government should continue to explore development of a business case for a third Menai crossing in relation to freight, including identifying the current constraints and reflecting sufficient capacity to meet projected growth;
- The Freight Working Group should continue to advise Welsh Government on proposals under development within the UK Freight Strategy, and the Welsh Government should give consideration towards developing a strategy for Wales.

National Transport and Finance Plan July 2015

- 2.4.14 The National Transport and Finance Plan was published in July 2015 and sits alongside the Regional Transport Plans in delivering the Wales Transport Strategy. The Plan sets out a series of proposed transport interventions across Wales, and also sets out targeted proposals along the main movement corridors via the new Trans-European Transport Network (TEN-T⁶). TEN-T⁶ includes the east-west corridor across North Wales from Holyhead to Chester, the east-west corridor across South Wales from Fishguard to Bristol via Milford Haven, Swansea and Cardiff.
- 2.4.15 The most significant proposal for Anglesey is to increase the capacity of the A55 across the Menai Straits, including capacity for walkers and cyclists. Included in the Plan is a proposal to review options for the Intra-Wales air service following expiry of the contract in May 2010 through funding for the delivery of two return services a day between Anglesey Airport and Cardiff Airport.
- 2.4.16 In addition, there are a number of relevant all-Wales interventions which are summarised below:
- Integrating the impact of travel into wider decision making;
 - Increasing healthy and sustainable travel choices;
 - Improving local bus services;
 - Improving rail services;
 - Improving access to key sites and services;

- Managing the road infrastructure.

2.4.17 The National Transport and Finance Plan overrides the National Transport Plan which was published in 2010 and expired in 2015. In December 2011, a prioritised National Transport Plan was published which includes proposals that could affect Anglesey. These are set out as follows:

- Address network issues on the A55 at junctions 15 and 16;
- Address network issues on the A55 from Abergwyngregyn to Tai'r Meibion;
- Y Gerallt Gymro Holyhead to Cardiff fast train service and programme of continual improvements;
- Sustainable Travel Centres.

Active Travel (Wales) Act 2013

2.4.18 WG presented an Active Travel (Wales) Act in 2013. The Act received Royal Assent in November 2013 and came into force in September 2014. This document sets out the Welsh Government's aim to maximise the opportunities afforded by walking and cycling and to reduce car use, particularly for short journeys. In addition, it identifies that the provision of walking and cycling facilities is an important element in creating equal opportunities. The Act *"makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve their infrastructure for walking and cycling every year."*

2.4.19 The Act makes provisions as follows:

- For approved maps of existing active travel routes and related facilities in a local authority's area (the existing routes map);
- For approved integrated network maps of the new and improved active travel routes and related facilities needed to create integrated networks for active travel in a local authority's area (the integrated map);
- Requiring local authorities to have regard to integrated network maps in preparing transport policies and to ensure that there are new and improved active travel routes and related facilities;
- Requiring the Welsh Ministers and local authorities to report on active travel in Wales;
- Requiring the Welsh Ministers and local authorities, in carrying out certain functions under the Highways Act 1980, to take reasonable steps to enhance the provision made for walkers and cyclists and to have regard to the needs of walkers and cyclists in the exercise of certain other functions;

- Requiring the Welsh Ministers and local authorities to exercise their functions under this Act so as to promote active travel journeys and secure new and improved active travel routes and related facilities.

Road Safety Framework for Wales (July 2013)

2.4.20 The Road Safety Framework for Wales was published in July 2013.

2.4.21 The framework covers a commitment to target high-risk road users through educational, engineering and enforcement measures. The underlying vision is:

“A continued reduction in the number of people killed and seriously injured on Welsh roads, with the ultimate aspiration of no fatalities.”

2.4.22 The proposed targets to meet this vision include:

- A 40% reduction in the total number of people killed and seriously injured on Welsh roads by 2020, meaning 562 fewer killed and seriously injured casualties;
- A 25% reduction in the number of motorcyclists killed and seriously injured on Welsh roads by 2020, meaning 64 fewer motorcyclist killed and seriously injured casualties;
- A 40% reduction in the number of young people⁵ (aged 16-24) killed and seriously injured on Welsh roads by 2020, meaning 139 fewer young people killed and seriously injured casualties.

2.5 Regional Plans and Programmes

North Wales Joint Local Transport Plan 2015

2.5.1 The North Wales Joint Local Transport Plan (LTP) was published in 2015 and has been jointly produced by the six North Wales Local Authorities of Conway, Denbighshire, Flintshire, Gwynedd, Isle of Anglesey and Wrexham.

2.5.2 The LTP covers a detailed programme from 2015-2020 and a framework of schemes until 2030 with an aim to “remove barriers to economic growth, prosperity and well-being by delivering safe, sustainable, affordable and effective transport networks”.

2.5.3 The key outcomes are:

- Connections to key destinations and markets;
- Access to employment;
- Access to services;

- Increasing levels of walking and cycling;
- Improved safety and security; and
- Benefits and minimised impacts on the environment.

2.5.4 A set of higher level interventions have been developed to deliver the vision and outcomes of the LTP. Key interventions that could affect Anglesey include:

- A5025 Pentraeth automotive junction capacity and safety enhancement;
- Holyhead A55 new port access road;
- Improvement to employment links between Valley and Amlwch along the A5025;
- Llangefni link road;
- Gaerwen link road;
- Anglesey cycling strategy;
- A5 corridor cycle route;
- A5025/ B5420 Four Crosses Roundabout improvement; and
- Gaerwen – Amlwch Line Corridor.

North Wales Rail Strategy

2.5.5 The North Wales Rail Strategy was developed as a key transport strand to feed into the RTP. It appraised options within the following categories:

- Rail passenger service enhancements and new stations;
- Rail freight strategy;
- Non-car station access improvements;
- Station car parking.

2.5.6 The most significant measure to be included in the final strategy on Anglesey is the proposal for a ‘Landbridge’ rail freight service from mainland Europe to Ireland through a Holyhead freight terminal. The aim would be to replace road journeys operating between ports in southern or eastern UK and Holyhead with an intermodal freight train. This would be the first scheme of its type in the UK.

2.6 Local Plans and Programmes

Joint Local Development Plan (JLDP)

- 2.6.1 The Anglesey and Gwynedd Joint Development Local Plan (JLDP) sets out the planning policy framework and strategic aims for development and land use from 2011 to 2026.
- 2.6.2 The JLDP identifies a number of key matters relevant to transport. These are:
- The impression that parts of the Plan area are remote;
 - Areas with poor telecommunications and ITC connections;
 - Problems with accessibility to services and facilities, in particular in rural areas because of a lack of choice in terms of modes of transport.
- 2.6.3 The JLDP is underpinned by several strategic objectives that related to transport including:
- SO3: Improve and maintain safe, efficient, high quality, modern and integrated transport networks to employment, services and education/ training facilities particularly by foot, bicycle and public transport, thus reducing where possible the number of journeys in private cars; and
 - SO4: Maximise the opportunities of Holyhead as a major international gateway and the A55, E22 Trans European network route and the A5025, A487, A470 as key transportation corridors.
- 2.6.4 The JLDP contains several strategic policies relevant to transport. These are summarised in **Box 2.1**.

Box 2.1 Summary of JLDP Strategic Policies Relevant to Transport

- **Policy ISA1: Infrastructure Provision** identifies a range of purposes for which financial contributions can be sought, where appropriate, including transport infrastructure including public transport as well as broadband infrastructure;
- **Strategic Policy PS 4: Sustainable Transport, Development and Accessibility** states that development will be located so as to minimise travel. The Councils will support improvements that maximise accessibility for all modes of transport, but particularly by foot, cycle and public transport. This will be achieved by securing convenient access via footways, cycle infrastructure and public transport where appropriate, thereby encouraging the use of these modes of travel for local journeys and reducing the need to travel by private care. The policy also sets out how by working with their partners, the Council will endeavour to improve accessibility and seek to change travel behaviour;
- **Strategic Policy PS 5: Sustainable Development** states that development proposals will be supported where it is demonstrated that it is consistent with the principles of

Box 2.1 Summary of JLDP Strategic Policies Relevant to Transport

sustainable development. All development proposals should reduce the need to travel by private transport and encourage the opportunities for all users to travel when required as often as possible by means of alternative modes, placing particular emphasis on walking, cycling and using public transport;

- **Strategic Policy PS 8: Proposals for National Significant Infrastructure Projects and Related Developments** stipulates that proposals for accommodate should contribute to a balance of positive outcomes for local communities, visitors and the environment;
- **Strategic Policy PS 9: Wylfa Newydd and Related Development** sets out that accommodation requirements of construction workers should be met in a way that highways and transport proposals for the Wylfa Newydd Project form part of the integrated traffic and transport strategy and minimises adverse transport impacts to an acceptable level, including those arising during construction, operation and decommissioning stages, and any restoration stages. Proposals should where feasible make a positive contribution to transportation policy objectives in the locality, and should include multi-modal solutions and investment that encourages travel by public transport, walking and cycling and other sustainable forms of transport.
- **Strategic Policy PS 10: Wylfa Newydd Campus Style Temporary Accommodation for Construction Workers** sets out the considerations to be taken into account in the preparation of a Local Impact Report;
- **Strategic Policy PS 11: Wylfa Newydd Logistics Centres;**
- **Strategic Policy PS 12: Wylfa Newydd Park and Ride and Park and Share Facilities.**

2.6.5 These JLDP strategic policies are supporting by more detailed development management policies. Those relevant to housing are set out in **Box 2.2**.

Box 2.2 JLDP Development Management Policies Relevant to Transport

Policy TRA1 Transport Network Developments;
 Policy TRA2 Parking Standards;
 Policy TRA3 Safeguarding Disused Railway Lines;
 Policy TRA4 Managing Transport Impacts.

IACC Cycling Strategy – 2013

2.6.6 The *Isle of Anglesey County Council Cycling Strategy* has been produced to coordinate the Council's approach to cycling, and to ensure that IACC is aware of and able to fulfil the requirements of the Active Travel (Wales) Act 2013 as well as other relevant legislation and policy. Existing cycling provision has been reviewed and potential

future provision considered. This includes both on and off-road routes as well as other related provision such as cycle parking.

- 2.6.7 In relation to Wylfa Newydd, the strategy indicates that proposals would necessitate improvements to the A5025 corridor (in line with the Active Travel (Wales) Act 2013). In addition, the proposals should ensure that consideration is made of walking and cycling routes to help reduce single occupancy vehicle trips to and from the Power Station Site.
- 2.6.8 The document also states that shared footway/cycleway paths should be provided with a minimum width of 2.5m where possible. This is in preference to the provision of segregated footway/cycleways.

Môn a Menai Sustainable Travel Centre

- 2.6.9 The Môn a Menai Sustainable Travel Centre (STC) covered the Menai Hub of Caernarfon, Menai Bridge, Llangefni and Beaumaris. The core partners in the delivery of the project were Gwynedd Council and IACC who received funding from Welsh Government. Other important stakeholders included Taith, Bangor University, Ysbyty Gwynedd and Sustrans.
- 2.6.10 Schemes undertaken over the three years of the project (2010-2012) on Anglesey included:
- Park and Ride/Share, Llanfairpwll – This scheme provides a park and ride/share facility. It supports the use of buses, or parking and sharing the onward journey in another car park. It was completed in 2013;
 - Lôn Las Cefni Upgrade: upgraded two sections of Lôn Las Cefni in Llangefni to improve links for pedestrians and cyclists travelling to, from and within Llangefni. The route now links to Pentre Berw;
 - A5 Shared Use Route – A study into the feasibility of providing a shared use path along the A5 between Llanfairpwll and Pentre Berw;
 - A5 Shared Use Route – A study into the feasibility and design of providing a shared use path along the A5 between Llanfairpwll and Bangor; and
 - Shared Use Route Menai Bridge to Llanfairpwll – Improvements to the shared use route which links the two settlements.

2.7 Other Studies

The Strategic Transport Study for Major Development Final Report (Grontmij April 2011)

2.7.1 This report has been prepared to set out a transport strategy for Anglesey that formed the basis of a justified position statement to inform the IoACC position in terms of transportation requirements for major developments on the Island, including nuclear new build. It identifies the most appropriate options and solutions up to 2025 to cater for existing and proposed trips on Anglesey. The transport strategy was prepared to assist in the formation of future policy development and decision making.

2.7.2 The study used the WelTAG (Welsh Transport Planning Appraisal and Guidance) approach for the development of a strategy. The results of the study indicated from a strategic view that the following would be required:

- **Abnormal Load Strategy** – Holyhead Port would act as the hub for abnormal load trips to the Island, but localised improvements to access to the port may be required. From the port, the abnormal loads could be transferred to development sites (such as Wylfa new nuclear build) via sea or road. The size of the load on road will be defined by horizontal and vertical alignment issues on the A55, A5 and local roads near development sites. Physical improvements such as passing places, accident prevention schemes, and visibility improvements would likely be needed;
- **General Freight Strategy** – this anticipated all freight deliveries to major development sites would be made via sea and rail via Holyhead. The existing rail head at the former Anglesey Aluminium site is noted to be used to receive freight deliveries suitable for movements by rail. Physical improvements such as passing places, accident prevention schemes, and visibility improvements would likely be needed to allow access to some major development sites. It is noted that any significant increase in freight traffic across the existing Menai Straits bridges would require a third crossing as the existing bridges are already at capacity;
- **Movement of Workers Strategy** – Encouragement for workers at major development sites to use sustainable travel modes. It is noted that the anticipated primary mode for workers would be Park and Ride/Park and Share. It is anticipated that one of the Park and Ride/Share sites would be on the mainland side of the Menai Straits to intercept workers before they cross the bridge and relieve existing pressure on the A5 and A55 links. Other schemes involve improved local bus services, improved local bus ticketing, incentives through employer travel plans, improved local cycle and walking routes, and improved public transport interchanges. It is anticipated that key local rail stations would also be upgraded and Anglesey airport (which is located at RAF Valley) would be a key destination for long distance trips.

Strategic Transport Study for Major Development – Review of Wylfa Documentation (Grontmij April 2011)

- 2.7.3 The purpose of this report was to review the document prepared for the Wylfa B development including a Transport Study, and Heavy Route and Marine Off Loading Facility (MOLF) study, both of which prepared by RPS.
- 2.7.4 The RPS Transport Study sets out that there are four locations where improvements would be needed on the local highways network to accommodate the Wylfa B development:
- A5/A5025 (Valley);
 - A5025 Llanfachraeth;
 - A5025 Llanfaethlu;
 - A5025/Site Access Road Tregele.
- 2.7.5 Conceptual designs for the improvements have been prepared for the four locations above, along with a range of other A5025 route improvements suggested by IACC based on the policies set out above.
- 2.7.6 The proposed improvements would, however, need a more comprehensive review in terms of the deliverability (land ownership, environmental impacts) and more detailed viability and costs work prior to these schemes being guaranteed to be delivered. Horizon proposes to undertake a series of on and off-line improvements to the A5025 the initial justifications for which originated within the RPS study.

Holyhead Port A55 New Access Link – Application for Principal Road Grant Funding (April 2009, Mott MacDonald/IACC)

- 2.7.7 This report was prepared to support an application to improve the link between Holyhead Town Centre, and the A55 and to increase the capacity of the route to and from the Port of Holyhead in order to improve the international gateway and avoid a major source of existing congestion within the town. It is considered there is a “missing link” between the Port and the A55 expressway.
- 2.7.8 The document proposed that a new “Holyhead Port Access Link” would be provided delivering the following structural improvements:
- Provision of a link to the A55 to provide high speed vehicle egress from the Port;
 - Relocation of the existing rail depot from the town to a new site at Penrhos;
 - Extension and improvements of the bus, coach, pedestrian and cycling facilities in and around the port area;

- Landscaping improvements to provide a high quality visual statement for the Port and town of Holyhead.

2.7.9 The proposal details are as follows:

- Removal of the redundant rail track from the Holyhead Sidings;
- Relocation of the operational rail facilities to a new location;
- Provision of a dedicated and direct link for all traffic from the Port exit to the Kingsland Roundabout (J1 A55);
- Realignment of Victoria Road, provision of a new signalised roundabout and visitor parking pays for town centre;
- New links between the Victoria roundabout and the town centre;
- Provision of new coach parking near the town centre;
- Modifications of the existing Kingsland Roundabout;
- Hard and soft landscaping measure associated with the new link road.

2.7.10 As such, all ferry outbound traffic would exit the Port on a dedicated and direct link to A55 Junction 1 (Kingsland Roundabout). All inbound traffic would enter the Port as it does currently using the signalised traffic junction and link to the A55 Junction 1.

2.7.11 A cost benefit analysis sets out the new link roads and associated works would be good value for money with a cost benefit ratio of 1.63. The total cost of the scheme is set out as £22,060,294.92.

Enterprise Zones Transport Infrastructure Feasibility Report

2.7.12 The '*Enterprise Zones Transport Infrastructure Feasibility Report*' was produced by Amec Foster Wheeler for IACC and sets out the results of a high-level appraisal of the potential implications of the Anglesey Enterprise Zones (AEZ) on the existing transport infrastructure. For the purpose of the appraisal, the ten AEZ sites were grouped into areas, comprising Holyhead (five sites), Llangefni (three sites), Gaerwen (two sites) and Amlwch (one site).

2.7.13 The opportunities and constraints for each of the AEZ areas were considered including sustainable transport access and available information on traffic flows, junction and link capacity and road safety.

2.7.14 To understand the potential traffic generation of the sites, Amec Foster Wheeler estimated a land use budget for each AEZ based on available information. Total traffic generation was calculated as 3,135 two way trips in the AM peak hour and

2,519 two way trips in the PM peak hour which were distributed onto the highway network based on 2001 census journey to work data. The highest impact of the potential traffic generation associated with the AEZ development sites was found to be on the A55. The study also considered the additional impact of the proposed Wylfa Newydd project which results in increases in traffic across the along the A55 and over Britannia Bridge.

2.7.15 The study identified potential improvements to the transport network including enhanced bus services and walking and cycling access based on the links between the AEZ sites and workforce locations. Twelve initial highway schemes were identified against which preliminary construction costs were calculated, but it was noted that these results were not based on detailed capacity assessments and that it assumed all sites in place, rather than a phased approach. The study highlighted capacity issues at four key locations:

- Existing bridges over the Menai Straits;
- On the approach to Holyhead at the end of the A55 in terms of access and egress to both the Port of Holyhead and the town of Holyhead;
- Around Llangefni, particularly in respect to the link between the A55 and the potential EZs within Llangefni; and
- Around Junction 2 of the A55 (associated with the development of four AEZ sites).

2.7.16 The study suggested that two packages of improvement schemes could come forward in the short term to provide wider area benefits.

Route Selection Study - 3rd bridge over the Menai Strait

2.7.17 On the basis of the findings of a recent study which concluded that improving capacity by introducing a three lane tidal flow configuration on the existing Britannia Bridge did not meet the required safety standards, a Strategic Outline Business case completed in Spring 2016 confirmed the need for a third Menai Crossing

2.7.18 WG appointed consultants in late 2016 to undertake a route selection study with a view to assess various options to address congestion on the existing Britannia Bridge. The route study is likely to take 18 months to complete and a public consultation will be undertaken as part of the selecting a preferred route. Announcement of the preferred route is expected in summer 2018.

2.7.19 The objectives of the study are as follows:

- To improve journey times between Junctions 7 and 10 of the A55 during peak periods, and to maintain improved journey time into the future;
- To improve journey time reliability between Junctions 7 and 10 of the A55;
- To improve network resilience and reduce reliance on the use of the Menai Bridge as an alternative route during maintenance or emergencies;
- To improve accessibility for pedestrians and cyclists crossing the Menai Strait including connections to long distance routes and key employment sites;
- To promote safety for trips across the Menai Strait;

2.7.20 Options under consideration include:

- Closing junction A55 8A and providing alternative links between the A55 and A5;
- Widening of Britannia Bridge to include new traffic lanes;
- New bridge directly to the west of Britannia Bridge;
- New bridge directly to the east of Britannia Bridge;
- New bridge to the east of Britannia Bridge.

2.7.21 All options will contain facilities for pedestrians and cyclists, consideration for the local landscape, ecological requirements and human environmental factors. The study includes reviewing the speed limit on the A55, local road access and arrangements at junctions.

2.8 Key Policy Messages for the Wylfa Newydd SPG

2.8.1 Based on the review of plans and programmes in this section, a number of key messages/issues relevant to Transport have been identified that will need to be considered in preparing the Wylfa Newydd SPG. These messages are summarised in **Box 2.3**.

Box 2.3 Key Policy Messages for the Wylfa Newydd SPG Transport

- Transport has key influences on national and international policy considerations and targets with regard to carbon emissions.
- The European Commission aims to reduce carbon emissions from transport by 60% by 2050 and focus on moving intercity passenger traffic and freight from road to rail or water.
- The Welsh Government has highlighted the key transport priorities as:
 - Integrating local transport;
 - Improving access between key settlements and sites;
 - Enhancing international connectivity;
 - Increasing safety and security.
- The regional and local plans and programmes include the following objectives:
 - Optimise accessibility to employment, education, health and services for all the diverse communities of North Wales;
 - Improve the quality and provision of passenger transport throughout North Wales, to and from the region and within Anglesey;
 - Facilitate the efficient movement of freight supporting the region's industry and commerce and its international gateway functions;
 - Provide, promote and improve sustainable forms of transport and infrastructure to minimise the negative impacts of transport on the local and global environment;
 - Improve safety of all forms of transport;
 - Enhance the efficiency and use of the transport network;
 - Upgrade and maintain the transport infrastructure, providing new where necessary.

3 Baseline Information and Future Trends

3.1 Introduction

3.1.1 This section describes the existing baseline characteristics of Anglesey in respect of transport and identifies how this baseline could change in the future, taking into account the proposed Wylfa Newydd. This helps develop an understanding of the key opportunities and challenges that should be addressed by the SPG. It draws on a range of datasets from sources including strategic transport assessment reports undertaken for IACC, such the *Strategic Transport Study for Major Developments*, 2011⁴ and the *Site Development Heavy Route and MOLF Strategy Study*⁵.

3.2 Baseline Information

Overview

- 3.2.1 The Wylfa Newydd site is approximately 23 km North East of Holyhead, this is the nearest deepwater port facility. Road access to the Wylfa Newydd site is via the A5025 which connects to the main A55 linking Anglesey the rest of North Wales.
- 3.2.2 The port of Holyhead lies on the western side of the Island and is the main ferry link to Ireland from Britain. Its approximate annual tonnages are 270,000 tonnes bulk and 170,000 freight units, 400,000 cars and approximately 2.7 million passengers⁶.
- 3.2.3 The A55 dual carriageway forms the strategic transport corridor crossing the Island from the Welsh mainland directly to the Port of Holyhead. The A55 also acts as the main feeder road for the remainder of the island.
- 3.2.4 The North Wales main line railway crosses the Island from Llanfairpwll to Holyhead providing 6 train stations. There is also a disused branch line from Gaerwen to Amlwch.

Port of Holyhead

3.2.5 The Port of Holyhead lies in a well-protected position due east of Holyhead Mountain, shielded from the Irish Sea by the historic Breakwater which is 1.5 miles in length. Holyhead is a 24 hour, deep water, lock-free port, centrally located on the Irish Sea coast. The port was used during the construction of the Wylfa 'A' station for the delivery of both bulk materials and AILs. The port is owned by Stena Ports who also

⁴ Isle of Anglesey County Council - *Strategic Transport Study for Major Developments*, 2011, Grontmijj

⁵ Horizon Nuclear Power - *Nuclear Power Project - Site Development - Heavy Route and MOLF Strategy Study*, 2010, Halcrow

⁶ <http://uk-ports.org/holyhead/> (accessed November 2017)

act as statutory harbour authority. The port is primarily a ro-ro facility with numerous daily sailings to and from Ireland. It is ranked third in terms of short sea ferry passenger movements within the UK.

Highway Network

- 3.2.6 The A55 is a high quality two lane dual carriageway with grade separated junctions that forms a major east-west trunk route between the port of Holyhead and the UK motorway network at Chester. It also forms part of Euroroute E22, which stretches from the Baltic coast to Dublin. The A55 bisects Anglesey on an east-west alignment between the Britannia Bridge over the Menai Strait to the east and the port of Holyhead to the west. The Britannia Bridge is the only section of single carriageway on the entire length of the A55 across North Wales.
- 3.2.7 The A55 across Anglesey was designed, built and financed by UK Highways A55 Ltd, a consortium comprising John Laing and Carillion Private Finance. The consortium now operates the A55, between Llandygyai in Gwynedd to Holyhead, which follows a similar route across the Island. UK Highways A55 also operates the short section of trunked A5 that crosses the historic Grade 1 listed Menai Suspension Bridge. The two bridges over the Menai Strait are the only transport links between Anglesey and the mainland. Both are historic structures with limited road width. Network rail owns the Britannia Bridge as the deck below the highway is a heavy rail line. During severe weather conditions, one or more of the bridges can be closed for safety reasons either to high-sided vehicles or to all traffic.
- 3.2.8 All other highway routes on the Island are county roads maintained by IACC as the local highways authority. The A4080 loops around the southern part of the Island linking Llanfairpwll to junction 5 of the A55. The A5025 follows the northern coastline to link Menai Bridge and Valley. The A545 runs along the southeast coast of the Island between Menai Bridge and Beaumaris. All three routes are single carriageway of varying quality.
- 3.2.9 The A5/A5025 route from Holyhead to Wylfa is a Highways Agency Class D advisory heavy load route.
- 3.2.10 The northern section of the A5025 which runs east of the Power Station Site to Amlwch is approximately 10km in length and predominantly is subject to the national speed limit with some 30mph sections, and sections of constrained carriageway width.

Rail Network

- 3.2.10 The North Wales Coast Main Line (NWCML) that links Holyhead and Chester runs around the southern coast of Anglesey between the Britannia Bridge and Holyhead. There are six stations: Llanfairpwll, Bodorgan, Ty Croes, Rhosneigr, Valley and

Holyhead. There is no dedicated parking provision for rail users at any of the Island's stations, although there is a 100 space car park adjacent to Llanfairpwll station owned by James Pringle Weavers. Station car parking at Holyhead is located off-site at the adjacent ferry terminal.

- 3.2.11 All stations on Anglesey are served by Arriva Trains Wales. Arriva operates two-hourly services between Holyhead and Cardiff and between Holyhead and Birmingham International, (all services operate via Chester and Shrewsbury) with some journeys of both calling at all stations across Anglesey. A lower frequency operates on Sundays. There are onward connections at Chester for Crewe, Manchester and Liverpool and at Shrewsbury for Aberystwyth, Pwllheli and Swansea. Virgin Trains operates direct services between Holyhead and London Euston via Chester that do not stop at the other Anglesey stations.
- 3.2.12 The NWCML route also carries freight traffic in addition to passenger services, and is designated part of the Trans European Network (TEN). Until the smelting works ceased in September 2009, there were several freight trains each week between Anglesey Aluminium Metals Ltd and Warrington. There is also nuclear traffic between Valley and Sellafield in Cumbria. The North Wales Rail Strategy allows for one freight train path per hour along the NWCML.
- 3.2.13 The Welsh Government, in partnership with Network Rail, commissioned a feasibility study into the reopening of the section of the disused Gaerwen to Amlwch between Gaerwen and Llangefni which was published in November 2010. Passenger services on this line stopped in 1964 and freight trains also ceased to run from 1993. The cost of re-opening the 4 mile section from Gaerwen to Llangefni was estimated at £25.1m.

Bus and Coach Services

- 3.2.14 The Island has a network of local bus services, of which some routes are operated commercially, and some routes operate under contract to IACC. Route 61 which runs between Amlwch and Holyhead via Cemaes Bay, operates in close proximity to the Wylfa Newydd site. This service operates at an approximately 2 hourly frequency with no evening or Sunday services. Service 62 operates from Amlwch to Bangor every 30 minutes on weekdays, with a less frequent evening service and a 2 hourly service on Sundays. 4 of the weekday services extend from Amlwch to Cemaes Bay. Service 32 operates between Amlwch and Llangefni via LLannerch-y-medd at an approximate 2 hourly frequency with no evening or Sunday service. The Island's busiest route is the 4/4B/4R/X4 service which links Holyhead to Llangefni and Bangor. This service operates every 30 minutes on weekdays. The 2011 Census figures show that 3% of employed persons aged between 16 and 74 who are in employment (excluding persons who work mainly from home), travel by bus.

- 3.2.15 National Express services operate between Bangor and London, Bangor and Manchester/Leeds, and Eurolines services operate from Ireland to London, Manchester and Leeds via Holyhead.

Air Services

- 3.2.16 Anglesey Airport is owned by IACC on land leased from Defence Estates. It is situated adjacent to the existing RAF base at Valley and is managed by Europa on behalf of IACC. Eastern Airways have replaced Citywings operating flights to and from Anglesey Airport on behalf of the Welsh Government. Services operating between Anglesey Airport and Cardiff International Airport began in May 2007, carrying over 14,000 passengers in its first year of operation. Currently there are two flights a day each way. In 2016 9187 passengers were carried to Cardiff, a reduction on the 10860 making the journey in 2015⁷.
- 3.2.17 Existing planes are Jetstream 41's and planning conditions limit flights to a maximum of 10 per day. The limitations are based on restricted airspace due to the airport being shared for business and military use.
- 3.2.18 Public transport links to the airport are limited. Some bus services have been diverted to call at the airport but the times are not closely aligned to the flight arrival and departure times. The nearest railway station is at Valley, approximately two and a half miles away, whilst Holyhead station is four miles away.

Cycling

- 3.2.19 Two of the UK's nine most major long distance cycle routes cross Anglesey, numbers 5 and 8. National Cycle Route 8 runs from Cardiff to Holyhead and is also known as Lôn Las Cymru. National Cycle Route 5 runs from Reading to Holyhead (not all complete), and the section between Chester and Holyhead is known as the North Wales Coast Cycle Route. Both routes on Anglesey are mainly on-road along quiet minor roads.
- 3.2.20 National Cycle Route 566 runs from Llanddeusant where it joins Route 5 and runs around the North of the Island linking up with route 5 again at Llanerch y Medd. This section is called Trywydd Copr or the Copper Trail. It then links with Llangefni and through to Newborough. The section between Bodffordd and Newborough is 27km of mainly off-road route and is known as Lôn Las Cefni.
- 3.2.21 A cycle route exists alongside the A5 crossing the Island in an east- west direction.

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https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2016_annual/Table_12_2_Domestic_Air_Pax_Traffic_Route_Analysis.pdf

3.2.22 There is a set of signed local routes on Holy Island called Green Links which link Holyhead and Valley with other settlements and tourist hubs on Holy Island. These are mainly on-road and were signed in 2013.

3.2.23 Of the 348 local authorities in England and Wales, Anglesey is ranked 254 in terms of travel to work by bicycle⁸ with just under 1% of journeys being made by this mode of transport. It is however ranked the fifth highest of the Welsh authorities.

3.3 Future Trends

3.3.1 There are a number of major developments proposed on Anglesey, as well as Wylfa Newydd, that may have an influence on the existing transport networks.

3.3.2 As identified in the ‘Enterprise Zones Transport Infrastructure Feasibility Report’ (Amec Foster Wheeler, 2013), if the proposed Enterprise Zone developments come forward, there may be future capacity issues in the following locations:

- Existing bridges over the Menai Straits;
- On the approach to Holyhead at the end of the A55 in terms of access and egress to both the Port of Holyhead and the town of Holyhead;
- Around Junction 2 of the A55 (associated with the development of four AEZ sites).

3.3.3 As indicated in the Anglesey and Gwynedd Joint Local Plan (2017) there is a focus on developing the region's tourism potential. The area's economy is much more dependent on the tourist industry than Wales and Britain. As the tourism industry is seasonal, developing tourism on the island may result in levels of traffic also becoming increasingly seasonal creating more fluctuation during peak times.

3.4 Key Issues for the Wylfa Newydd SPG

3.4.1 Based on the findings of the baseline analysis and evidence base, a number of key issues relevant to Transport have been identified that will need to be considered in preparing the Wylfa Newydd SPG. These messages are summarised in **Box 3.1** below.

Box 3.1 Key Issues for the Wylfa Newydd SPG Transport

- The A55 offers a good quality dual carriageway link from east to west of the island, but does not directly serve the Wylfa Newydd site;

⁸ <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-295663>

- There are some current issues with the A55 in and around the port of Holyhead;
- The Wylfa Newydd site is served by the A5025 which is a two-way single carriageway of varying quality with sections of constrained road widths and road bends;
- Public Transport provision on the island is limited, although the Wylfa Newydd site is served by the 61 and 62 bus routes offering regular connections to Amlwch and Holyhead;
- The North Wales Mainline rail link routes from Holyhead to Bangor linking the island to the national rail network, however, the route and station locations do not ideally support the proposed island wide development strategy;
- The port of Holyhead is located 23km south west of the site. It is a deep-water port but the facilities available for heavy module delivery into the Port of Holyhead are limited and will restrict the shipping and offloading options available;
- The Island contains a number of longer distance cycleways but local cycle paths supporting local journeys would encourage further modal shifts from the use of the private car.

4 Challenges and Opportunities

4.1 Introduction

4.1.1 Based on the review of plans and programmes presented in **Section 2** and analysis of the baseline and emerging evidence base in **Section 3**, this section draws together the key strengths, weaknesses, opportunities and threats related to Transport to be addressed by the Wylfa Newydd SPG. Where appropriate, it also provides guidance in respect of how the SPG could respond to the issues identified in order to help inform the preparation of the document.

4.2 Constraints

4.2.1 There are a number of challenges that have been identified as part of this review. These challenges (constraints) are presented throughout the report. In addition to these Island-wide issues, there are a number of key transport issues that will need to be addressed which are more specific to Wylfa Newydd. Highlighted within this section is a brief summary of the issues identified both on a strategic Island-wide basis and those specific to Wylfa Newydd.

Strategic Challenges

4.2.2 The key strategic challenges highlighted throughout this report are as follows:

- A55 Britannia Bridge – this bridge is a single carriageway route with one lane in each direction, which accommodates high traffic volumes each year and is close to its existing capacity;
- A5 Menai Bridge – this bridge is single carriageway route with one lane in each direction and apart from the A55 Britannia Bridge is the only other direct highway connection to the mainland;
- The A55 – the existing A55 corridor bisects the Island linking Britannia Bridge in the east to Holyhead in the West. The route forms the main distributor link for the Island as well as strategic access from the Welsh mainland to the Port of Holyhead and beyond. It forms part of the Euroroute E22, which stretches from the Baltic coast to Dublin. This dual road and any developing capacity issues could produce future stresses;
- The A55 Junctions – the A55 connects to the A5 and other local distributor routes by a series of grade separated junctions. Each of these junctions is critical to the continued development and well-being of the local hinterland to which the junction serves;
- The Port of Holyhead, Sea Access – the various reports have highlighted several issues and complications surrounding access to the port of delivery by sea. Each

of these issues represents a challenge to the development of the port as a comprehensive freight and passenger terminal;

- The Port of Holyhead, Vehicular Access – the reports have highlighted constraints to the vehicular access to the port. This is a particular issue in terms of:
 - Absolute vehicular capacity at times of peak operation;
 - Abnormal Indivisible Load(AIL) access to/ from the site; and
 - Modal interchange.
- The existing rail infrastructure – the route of the existing rail network is a single route double track that bi-sects the Island of Anglesey. There are six stations throughout the island serving a similar corridor to the A55. The route and station locations do not ideally support the proposed Island-wide development strategy; and
- Other Development proposals – the Island has a programme and well developed strategy for a series of large scale development (AEZ proposals). This is will have an additional impact upon the strategic network of the Island as well as the delivery of Wylfa Newydd.

Wylfa Specific Transport Challenges

4.2.3 The previous section has highlighted the Island wide issues relating to the development proposals for Wylfa Newydd. There are a number of more specific issues relating to the development. Potentially specific constraints are as follows:

- The A5025 from Valley to the Wylfa Newydd site– this route will experience a significant increase in the volume of traffic as a result of the Wylfa Newydd project, including a considerable percentage of large vehicles and could include the need for AIL deliveries. The route has several pinch points, environmental and accident issues along the route, in addition the junction of the A5 / Valley is considered an issue;
- The A5025 between Wylfa Newydd and Amlwch – this route may experience an increase in the volume of traffic as a result of the Wylfa Newydd project. The route has several pinch points as well as accident issues along the route;
- The highway route from the Welsh Mainland to Valley - the route is likely to have significant increases in traffic volume as a result of Wylfa Newydd. Some of the key issues along this route are:
 - Britannia Bridge;
 - A55 Capacity (particularly at peak times of the day and holiday seasons); and

- A55 Junction 3 (A55 / A5 junction).
- The highway route from the Port of Holyhead to Valley – the route is likely to have significant increases in traffic volume as a result of Wylfa Newydd. Some of the key issues along this route are:
 - The port access;
 - A55 / A5 Junction (includes ‘Black Bridge’);
 - A55 Junction 1;
 - A5 between the Port of Holyhead and the Valley (as the alternative route to the A55); and
 - A55 Junction 3 as the main strategic route through to the A5025 (alternative to the A5 route).
- There are limited opportunities for alternative routes to the A55 / A5025 route into the site. If there is an issue along these routes, it could cause issues with any construction programme (lack of highway network resilience);
- Limitations to the quantity and type of delivery achievable at the Port of Holyhead;
- Location of rail head access in relationship to the location of Wylfa Newydd for:
 - Potential for delivery access to the Wylfa Newydd site;
 - Potential for rail as an alternative for staff (construction and permanent) wishing to access the Wylfa Newydd site; and
 - Limitations of the public transport network within the area and its potential for an alternative mode of transport for staff (construction and permanent) wishing to access the Wylfa Newydd site.

4.3 Opportunities

4.3.1 There are a number of opportunities that have been identified as part of this review which are summarised in the following section.

Strategic Opportunities

4.3.2 The key opportunity is the presence of realistic alternatives to the highway network as means of access onto the Island, potentially minimising the impact upon the local and regional highway network and promoting the environmental sustainability of the project:

- The A55 provides a high-quality access to the Island;
- The Port of Holyhead provides a high quality direct access to the Island for many sizes and quantities of material;
- The existence of the North Wales Coast rail line provides an opportunity for alternative means of access to the Island other than the use of the highway network;
- The presence of the Anglesey Airport provides an additional alternative means of access albeit capacity limited by terms of the existing planning consent.

Local Opportunities

4.3.3 The previous section has highlighted the Island-wide opportunities relating to the development proposals for Wylfa Newydd. There are a number of more specific opportunities relating to the development. Potentially specific opportunities are:

- There is an existing nuclear power station adjacent to the site which presents opportunities in terms of required infrastructure associated with it;
- The development is on the coast and therefore this offers a potential for delivery by sea via the creation of a jetty/landing (MOLF);
- The local highway network which could facilitate an expansion in public transport provision linked to strategic transport routes such as the A55; and
- Location of development in accessible locations in order to take advantage of existing transport infrastructure and local services and facilities.

4.4 Summary SWOT Analysis

4.4.1 **Table 4.1** presents a summary analysis of the strengths, weaknesses, opportunities and threats associated with Wylfa Newydd on Transport and in the context of the Wylfa Newydd SPG.

Table 4.1 SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • The site is adjacent to the existing Wylfa Nuclear Power Station and has the required infrastructure associated with it; • The site is located adjacent to an existing A road (A5025); • The site is close to a main strategic route (A55); • The site is located adjacent to the sea; • The site is relatively close to the Port of Holyhead; • The site is relatively close to the rail network. 	<ul style="list-style-type: none"> • The access routes to the site may not be of sufficient quality to cater for all of the construction traffic and / or operational staff; • The site does not have direct strategic access to road, rail or port facilities; • Routes to / from the site for Abnormal Loads may be constrained; • Britannia Bridge is a potential ‘bottle neck’; • The variability in the transport conditions throughout the Island due to its nature as a holiday destination; • Workers accommodation may not be in close proximity to public transport routes.
Opportunities	Threats
<ul style="list-style-type: none"> • The main road from the A55 to the A5025 could be upgraded to accommodate access requirements; • A third crossing of the Menai Straits is planned; • The connectivity between the port of Holyhead and the Wylfa site can be improved; • The connectivity between the port of Holyhead, Rail Network and the Wylfa Newydd site can be improved; • The opportunity to construct a MOLF adjacent to the construction site; • The opportunities to provide alternative sustainable means of access to the site (park and ride / park and share, freight logistics park) thereby providing a legacy for Anglesey; • The opportunity to provide improved public transport services and cycling facilities to support the development and the rest of the Isle of Anglesey; 	<ul style="list-style-type: none"> • The resilience of the Island’s highway network; • The statutory requirements needed to upgrade highway links; • The capacity limitations of the Port of Holyhead; • The limitations of the rail network within the area; • The construction of Wylfa Newydd may have a detrimental impact upon the economic development elsewhere upon the Island if additional congestion results; • Increase in carbon emissions from the transport sector on the Island as a result of an increase in journeys.

Opportunities	Threats
<ul style="list-style-type: none"> • The opportunity to provide lasting improvements to the infrastructure of the island that will remain after the construction is complete; • The development could present opportunities for associated development to be provided close to Wylfa Newydd where appropriate or close to existing settlements to promote accessibility hence reducing the need to travel 	

4.5 Summary of Key Matters to be Addressed by the SPG

4.5.1 The following are considered to be key matters to be addressed by the SPG, in relation to transport:

- The impact of the development upon key existing pieces of key strategic transport infrastructure including (but not limited to) such as:
 - Britannia Bridge;
 - A55;
 - The Port of Holyhead;
 - The rail network; and
 - Links to Anglesey Airport.
- The impact of the development upon local transportation Infrastructure (but not limited to) such as:
 - The A5025;
 - The A5 / A5025 junction at the Valley;
 - Local access routes to the development; and
 - Local public transport accessibility.
- The need to reduce the travel demand to the site by the private car by promotion of alternative means of transport by such (but not limited to) initiatives as:
 - Car share / car pool;
 - Park and Ride/Share;

- Links to railway stations;
 - Cycling;
 - Walking; and
 - Locating accommodation in accessible locations.
- The need to reduce the environmental impacts of transportation to / from the site;
 - The need to adequately manage the delivery of goods to the site by maximising the use of alternatives to road transport by promoting the use of the following when they present a viable alternative and minimise the need for delivery by road:
 - Sea; and
 - Rail.
 - Minimise the impact of the development upon other economic activities so as not to impact detrimentally upon the following:
 - The existing tourist industry;
 - The existing economic activity of the Island; and
 - The economic development of the Island.

4.6 How Should the SPG Respond

4.6.1 Wylfa Newydd will need to include guidance and detailed criteria which seeks to ensure that the Wylfa Newydd project addresses transport opportunities and constraints. More specifically, the SPG should aim to set out the need to:

- Minimise the impact of the development upon the key strategic transport infrastructure;
- Minimise the impact of the development upon the key local transport infrastructure;
- Promote transport and travel to the site and associated developments by modes other than the private car;
- Maximise the use of the sea as a means of transportation of goods and construction materials to the site;
- Maximise the opportunities for alternatives to long distance goods vehicle deliveries by road to /from the site;

- Require adequate assessment of the development impact of the goods deliveries to the site;
- Discourage the use of less suitable roads as a means of access to the site;
- Require adequate assessment of the impact of the delivery of any abnormal indivisible load and ensure that adequate provision is made;
- Ensure that the development does not compromise the existing and future economic development of the Island through both the construction and operational phase;
- Ensure that development generating significant traffic flows (such as residential) is located in accessible locations close to existing services and facilities; and
- Take account of the differing flow conditions throughout the year on the island.



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