



Scotland England Green Link 2 - English Onshore Scheme

Environmental Statement:
Volume 3

Outline Construction Traffic Management Plan

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For: National Grid Electricity Transmission

Quality information

Prepared by	Checked by	Verified by	Approved by
David Cleasby	Stephen Moss	Tom Cramond	Michael Williams

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Outline Construction Traffic Management Plan

1. Introduction

1.1 Project Summary

National Grid Electricity Transmission (NGET) owns and operates the high voltage electricity transmission system in England and Wales. NGET has a statutory duty to ensure electricity is transported safely and efficiently from where it is produced to where it is needed. To meet this obligation, in collaboration with Scottish and Southern Electricity Networks (SEN) who own and operate the high-voltage electricity transmission network in the north of Scotland, NGET is proposing the construction of a new High Voltage Direct Current (HVDC) link from Peterhead in Aberdeenshire, Scotland, to Drax, North Yorkshire referred to as the Scotland England Green Link 2 (SEGL2, hereafter referred to as the 'Project'). This Outline Construction Traffic Management Plan (CTMP) has been prepared for control and management of the vehicle movements associated with the construction of the components of the Project that are on land in England, also referred to as the English Onshore Scheme.

The English Onshore Scheme comprises approximately 69 km of underground HVDC cable from the landfall at Fraisthorpe, to the connection to the existing electricity transmission system at Drax Substation. There is also a converter station proposed, which is located immediately east of the existing Drax Substation which will be the only permanent above ground infrastructure. Additionally, to enable construction activities, there will be a temporary haul road installed along the majority of the HVDC cable route, with up to 18 temporary construction compounds located along the length of the English Onshore Scheme. These temporary construction compounds will typically be utilised for the storage of plant and machinery and stockpiling materials, as well as the provision of site management offices, welfare facilities for staff (kitchen facilities, storerooms, toilet facilities), parking, and plant and material storage.

1.2 Purpose of the Construction Traffic Management Plan

The most significant traffic impacts generated by the proposed English Onshore Scheme will occur during the construction phase, with a workforce varying according to the construction operations. This key purpose of this Outline CTMP is to set out the measures which would be implemented to mitigate the impact of construction vehicle trips (especially Heavy Goods Vehicles (HGVs)).

It should be noted that this document forms an Outline CTMP, as origins of materials required for construction are not yet known. Assumptions have been made as to the routing vehicles would take to and from the works areas along the length of the English Onshore Scheme.

This Outline CTMP will be developed further by the appointed Contractor(s) in consultation with East Riding of Yorkshire Council (ERYC), Selby District Council (SDC), National Highways (as necessary), and other stakeholders (if required) following award of consent. The structure of the detailed document will expand upon the information included in this Outline CTMP.

It is recognised that there will be multiple contractors delivering different phases of the English Onshore Scheme (i.e. the cable works and the converter station), and as such individual Detailed CTMPs will be created following the foundations of this Outline CTMP relevant to their works. It is also intended that the Detailed CTMP(s) will be a 'live' document and will be updated as and when required, being formally reviewed every six months (as a minimum) by the Contractor's HSE team.

1.3 Roles and Responsibilities

If not undertaken by a named member of the Contractor's Safety Health and Environment (SHE) team, a Traffic Safety and Control Officer (TSCO) may be appointed for the duration of the construction of the English Onshore Scheme to act as the main point of contact and undertake the following duties in relation to traffic management:

- Ensure that works are being carried out in accordance with the CTMP;
- Check all Traffic Management drawings for compliance prior to issue;
- Manage applications for any required temporary Traffic Regulation Orders in relation to any required road closures, one-way restrictions or partial blocking of the highway, or implementation of temporary speed limits; applications for the introduction of temporary traffic lights; or other notification to the Local Highways Authority;
- Ensure sufficient resource is available to maintain Traffic Management on site;
- In conjunction with the project SHE team undertake monitoring of public roads, site accesses and site roads for construction debris (mud) and ensure cleaning and measures to reduce future emissions are undertaken as soon as is practicable; and
- Monitor the Traffic Management schemes and layouts to ensure their effectiveness and safety to workers and public.

The TSCO or appointed person will report to the Project Manager and Site Manager.

2. Project Location

2.1 Landfall

The English landfall of the Project is located at Fraisthorpe in East Riding of Yorkshire, approximately 2 km south of Bridlington.

2.2 Underground DC Cable Route

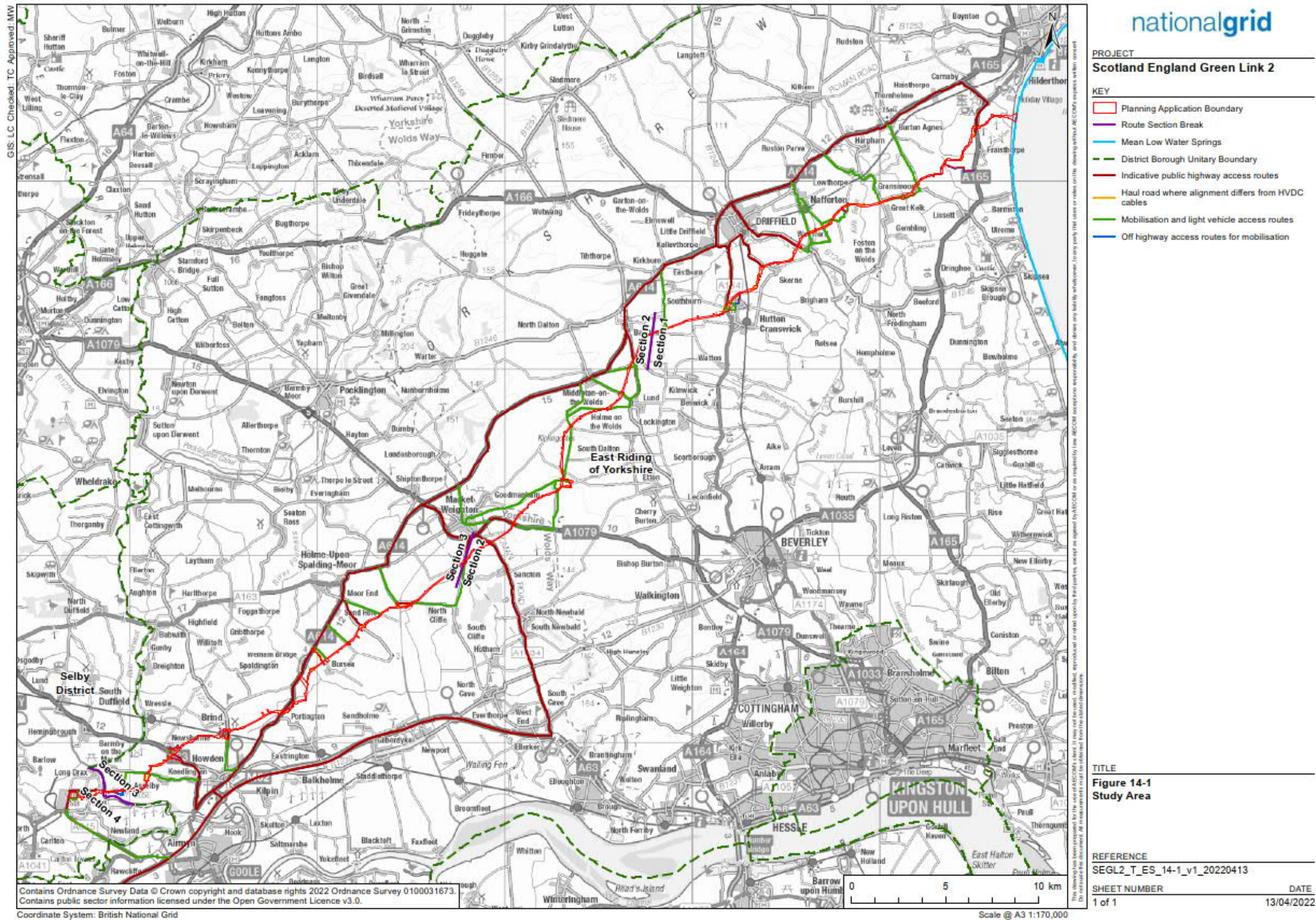
The underground DC cable route will entail the installation of two HVDC cables in a single trench approximately 69 km long by 1.5 m wide by 1.5 m deep from the landfall at Fraisthorpe to the proposed converter station site immediately east of Drax Power Station, in North Yorkshire. Works would occur within a temporary construction corridor up to 40 m wide. It is expected that the majority of the HVDC cables will be installed by direct burial, however, at certain locations such as major roads, watercourses and railway lines the HVDC cables may be installed by trenchless methods such as horizontal directional drilling (HDD). In addition to the working corridor there would be a need for temporary construction facilities along the route, namely up to 18 construction compounds. All land temporarily affected by installation works would be reinstated following completion of the installation activities.

2.3 Converter Station and Underground AC Cable Route

Construction of a converter station on a site adjacent to the immediate east of New Road east of Drax Power Station. The exact footprint of the converter station is subject to further design with maximum parameters of approximately 300 m long by 200 m wide (approximately 5 hectares (ha)) with buildings no higher than 30 m. It will include electrical equipment located outdoors and within buildings. A temporary construction compound will be required adjacent to the site.

The converter station will be connected to the existing electricity transmission system at Drax Substation by up to six underground AC cables. These will extend underneath New Road, and will likely be no longer than 500 m.

Figure 2-1: English Onshore Scheme



3. Communications

To ensure that all parties are aware of the requirements, controls and reporting requirements as agreed within the CTMP, the final document will be circulated to:

- the Client (NGET);
- the Contractor (including all subcontractors);
- Local Planning Authorities; and
- statutory and non-statutory consultees, as required (including relevant stakeholders).

This document will be maintained within the SHE management system and a hard copy kept within the site office.

Weekly SHE meetings will be held, which the TSCO (or nominated person with responsibility for traffic management) will attend. These meetings will incorporate discussion of traffic management and will communicate, discuss and consult any change in conditions, working practices, health, safety and environmental arrangements, procedures and overall performance. The meetings will include any traffic and/or transport related near misses or hazards that have been identified and any residual risks that have been identified in conjunction with the implemented remedial or mitigation measures. The meetings will be minuted, will include attendance records, and will be distributed to all relevant parties for reference.

The weekly SHE meetings will be augmented by additional meetings at intervals dictated by the requirements of the contract or at key stages of the works. Minutes of all such meetings will be produced and held on file for record purposes, with copies supplied to all relevant parties.

It will be the responsibility of the Contractor to ensure that all staff (directly employed by the Contractor or subcontractors) are provided with:

- Details of the prescribed construction routes, this should include clear mapping of the prescribed routes including identification of any restrictions which may be in place (it is recommended that a colour coded system is employed);
- A Code of Good Practice in relation to traffic and transport (this may be a clear and concise bullet pointed list, also suitable to be advertised at site notice boards);
- Traffic Incident Management Plan;
- Project/ emergency contact details;
- Delivery management systems and vehicle monitoring; and
- Details of timing restrictions in relation to construction traffic movements.

This information must be communicated to all drivers of construction traffic.

All personnel (workers) will receive site inductions covering the use of vehicles, traffic rules on site, traffic routes and speed restrictions. A record of inductees and attendees will be held on site.

3.1.1 Public Communications and Liaison

As set out, at **Chapter 18: Outline Construction Environmental Management Plan** of the Environmental Statement, prior to commencing works on site, the Contractor will develop and implement a stakeholder communications plan that includes community engagement. This is to include traffic management. All public communications will be co-ordinated through and agreed in advance with NGET.

Where required, in addition to ensuring that the public is fully informed of the proposed programme of works (including working hours/ times of traffic movements), the Contractor will ensure that procedures are established for notifying the public in advance of planned traffic movements which are greater than the normal 'day to day' operations. It should also be noted that the agreed period of advanced notification will similarly apply to any alterations in the construction programme or working hours (times

of vehicle movements) that have been agreed with the Contractor and the relevant departments at the appropriate local authority.

Any traffic related complaints received will be investigated, with appropriate action taken and recorded, so that a full audit trail is available should the complainant raise the issue(s) with the local authority. The complainant would be provided with a response outlining the results of the investigation and any action taken.

All public communications will be co-ordinated through and agreed in advance with NGET. If project staff are approached by a member of the media, they will be politely re-directed to the NGET Press Office on (telephone number to be confirmed).

Details of the complaint procedure are included at Section 6.

3.1.2 Communication with other sites

The Contractor must also ensure that regular liaison meetings with other high risk construction sites within 500 m of the planning application boundary are undertaken to understand the interactions of the off-site transport/ deliveries which might be using the same strategic road network routes. This may include works on different phases of the English Onshore Scheme.

4. Construction Phase Details

To provide context for the transport impacts related to the construction of the English Onshore Scheme (the period which will generate the greatest amount of traffic), a summary of the main engineering elements and their related construction activities and predicted programme is provided in **Table 4-1** and described in more detail in **Chapter 3: Description of the English Onshore Scheme** of the Environmental Statement .

Table 4-1: Summary of the Main Engineering Elements and Estimated Programme

Element	Related Activities
Cabling Works	Open cut trench and direct burial, Open cut trench and ducting, Trenchless methods, and Jointing
Converter Station	Enabling works, Main civil works, Installation and Commissioning.

The overall construction period for all phases of the English Onshore Scheme is therefore anticipated to last from late 2024 to 2029, with 2025 and 2026 being the years when most construction is predicted to take place (construction occurring on all phases). Details may vary following appointment of the principal Contractor. However, all construction phase activity would be regulated via relevant documents. An overview of likely programming of construction activities is noted in **Table 4-2**.

Table 4-2: Overview of Total Traffic Associated with each Construction Activity

Construction Activity	Construction Period (Months)	Construction Start/End Data
Construction Compound Installation	9	October 2024 to July 2025
Bellmouth Installation	9	December 2024 to July 2025
Access Road Installation	29	December 2024 to March 2027
Duct Installation	33	March 2025 to December 2027
Cable Installation	56	March 2025 to October 2029
Converter Station	71 (52 Months of Construction)	January 2024 to September 2029

These documents would be the subject of pre-commencement planning conditions and thus subject to the approval of the relevant highway authority.

4.1 Construction Vehicles Classification

A variety of vehicle types would be used for the construction of the proposed development. Vehicles would be required to transport people, equipment, and construction materials, as well as for exporting excess cut material (overburden).

Volumes of Light Goods Vehicles (LGVs) and HGVs associated with the construction phase of the English Onshore Scheme are detailed and assessed as part of the Transport Assessment (TA). For the purposes of the TA and environmental assessment work, construction vehicles are classified as follows in accordance with the Driver and Vehicle Standards Agency Lorry types and weights guide:

- LGV = Vehicles 3.5 tonnes or below in gross weight; and
- HGV = Vehicles above 3.5 tonnes in gross weight.

The English Onshore Scheme will also require the movement of Abnormal Indivisible Loads (AILs). AILs are defined as vehicles which fall outside the provisions contained within The Road Vehicles (Construction and Use) Regulations 1986 and The Road Vehicles (Authorised Weight) Regulations 1998. At present, it is estimated that there will be 100 trips related to AILs; however, this number is subject to change.

4.2 Anticipated Vehicle Movements

The anticipated volume of construction-related traffic has been calculated by NGET engineers based on their experience of delivering similar schemes, identifying the material, plant and personnel requirements for all construction activities, and assigning the associated vehicles to stages in the construction process. This construction programme is approximate and has been developed for the purpose of estimating traffic flows. The appointed construction Contractor will be responsible for the preparation of a detailed construction programme which will inform the detailed CTMP.

The calculation of predicted construction related traffic identifies the number of HGVs, LGVs, cars and AIL's (two-way movements) per month. In order to assess a worst-case scenario, the highest individual month traffic volume has been used from each of the construction years. Assuming a 24 day working month results in the following daily traffic movements by year:

- 2025 – 657 vehicles/ day;
- 2026 – 400 vehicles/ day; and

There will also be a requirement for a significant number of AILs to be delivered throughout the length of the English Onshore Scheme during the construction phase. At present, it is estimated that there will be 100 trips related to AILs; however, this value is subject to change.

5. Mitigation

5.1 Working Hours and Construction Traffic Restrictions

Work will take place between the hours set out in the relevant conditions of the planning permission, which may relate to hours of the day, days of the week, and works that take place outdoors and inside, and background noise levels. The agreed working hours will be set out prior to construction.

In addition to a restriction on construction hours, there may also be a requirement for restrictions on when construction traffic can use routes directly passing or passing close to sensitive areas such as primary schools or commercial premises. Such restrictions would be agreed with the Local Highways Authority (LHA) in advance of construction and will be detailed in the Detailed CTMP. Such restrictions may include travel during school drop-off and pick-up periods due to the potential for children to be on the road and congestion caused by waiting vehicles.

Further timing restrictions linked to junction capacity results (prohibiting site construction vehicle use at periods of peak traffic flows); in consideration of loading times at commercial premises to minimise disruption and congestion; and in relation to local special events (for example cycle races) may also be required and will be further described in the Detailed CTMP following agreement with the relevant LHA.

Where reasonable and practicable, construction vehicles (including AIL) will avoid travelling in convoys on public roads.

Where required, suitably qualified personnel will be present at key locations during construction to guide traffic, the public and to enhance safety.

5.2 Abnormal Loads

AIL deliveries will be programmed in such a way so as to cause minimal disruption i.e., at night or during off-peak hours. All AIL deliveries will be accompanied by escort vehicles with suitable signage and warning beacons. All AIL convoys will travel at low speed. If abnormal loads require incurring onto pedestrian space, footways will be closed on a temporary basis. Temporary traffic management will be provided during AIL deliveries where required. The Department for Transport's Electronic Service Delivery for Abnormal Loads (ESDAL) system (which is the official system for notifying the police and the highways and bridge authorities about an intention to transport very large items by the road networks) will be used for notifications, along with advanced notification to the general public, the methods for which will be defined in the Detailed CTMP.

Where reasonable and practicable, multiple AIL vehicles will avoid travelling in convoys on public roads.

The appointed Contractor will commission/ produce an AIL report to assess the transformer delivery to the converter station. This will need to demonstrate that a suitable route is available from the port of import to the proposed converter station site, supported by desk-based swept path analysis and a record of consultation and agreement with the key highway authorities. The Contractor is responsible for ensuring that the AIL report is completed in sufficient time for the agreements with the key highway authorities to be in place ahead of the delivery. The delivery will not be allowed to occur until such agreements are in place.

5.3 Temporary Traffic Management

Traffic Management methods would be used to enhance safety conditions on the strategic road network (SRN) and the local road network (LRN) and where physical mitigation measures are impractical or cannot be accommodated during the construction phase of the English Onshore Scheme. Traffic Signs Manual Chapter 8 states:

The complexity of traffic management arrangements varies from scheme to scheme, but the primary objective is always to maximise the safety of the workforce and the travelling public. The secondary objective is to keep traffic flowing as freely as possible.

Traffic Management on all highways and roads (except dual carriageways with a speed limit of 50 mph or more) would comply with the UK Government's Code of Practice 'Safety at Streetworks and Roadworks' (DfT, 2013) and would be agreed with the relevant LHA prior to the commencement of

works. Traffic Management signage would be in accordance with the Traffic Signs Regulations and General Directions (TSRGD) 2016 and Traffic Signs Manual Chapter 8. Traffic Management arrangements would be produced at the detailed design stage for each access. Detailed designs, site specific risk assessments and method statements would be produced and agreed with the relevant LHA for all Traffic Management and highways related construction activities.

5.4 Routing of Construction Traffic

Prior to construction commencing, the Contractor will undertake a Road Safety Assessment and Road Safety Audit on the final English Onshore Scheme design and any temporary access arrangements. The findings will inform the Detailed CTMP.

5.5 Construction Route Hazard Risk Register

The Contractor will produce a construction route hazard risk register (or similar) as part of the process of finalising the construction routes for the English Onshore Scheme. This will identify risks and locations along with possible additional mitigation measures to be considered further during detailed design and Detailed CTMP implementation.

5.6 Condition Surveys and Maintenance

The Contractor(s) will ensure that a road condition survey (also referred to as a dilapidation survey) is carried out prior to any enabling works or construction commencing. The results of this survey will determine the areas which require remedial works to ensure they are suitable to accommodate construction traffic associated with the English Onshore Scheme whilst maintaining accessibility and safety for existing road users.

Furthermore, the current condition of the highway network will be documented so that a 'Wear and Tear Agreement' can be made with the relevant LHA to ensure that the condition of the highway network is kept to a similar level post-construction as it is pre-construction. It is expected that the Contractor will also undertake a post-construction road condition survey to prove that this is the case.

Winter maintenance will be carried out on public roads which will be used by construction traffic to maintain road user safety, this will include de-icing and snow clearing. These works may be undertaken by the Contractor or a contribution agreement may be reached with the relevant LHA (to be described in the Detailed CTMP).

The public highway in the vicinity of site accesses, site accesses and temporary accesses will be inspected daily for the presence of site-related debris (mud). As detailed, regular road maintenance (including cleaning) will be carried out as standard. A wheel washing system will be implemented, this will be fitted with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable. The Contractor will ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits to minimise the risk of trackout of debris to the public highway. Plant and equipment washing facilities will also be provided where required to prevent the fall-off of dirt during transport off site.

Road sweeping (including and water jet vacuums) will be undertaken as necessary to remove any material tracked out of the site to the public highway. This may require the sweeper being continuously in use.

Within the site, all haul routes are to be inspected for integrity and necessary repairs to the surface undertaken as soon as reasonably practicable. Hard surfaced haul routes will be installed wherever possible and the road sweeper will also be employed – this will minimise the potential for the pick-up of debris by road-going vehicles. All haul roads are to be regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.

An inspection, monitoring and repair strategy during the construction of the English Onshore Scheme will be agreed with the relevant authority and included in the Detailed CTMP. The Detailed CTMP will also set out details for agreeing maintenance costs with the relevant authority.

5.7 Signage

The approved construction traffic routing (the defined routes to and from working areas) will be clearly signposted along the route.

Additionally, a consistent arrangement of signage will be in place at and/ or near to each Access Point during its use in order to provide relevant warnings and information to other road users of the likely presence of high volumes of construction traffic (HGV) in the area. This may also include details of forthcoming AIL movements and any associated traffic restrictions. Further details are to be presented in the Detailed CTMP.

Temporary signs providing route information for contractors will also be erected at key locations along the proposed construction traffic routes on the local road network. Project information boards will be erected and will include key project information for the public and relevant contact details.

As stated previously, all Traffic Management signage would be in accordance with the Traffic Signs Regulations and General Directions (TSRGD) 2016 and Traffic Signs Manual Chapter 8.

5.8 Speed Limits

All construction traffic will abide by the posted speed limits (or any temporary speed limits which may be in place) for the roads travelled, or by any advisory speed limit as defined by the Contractor in the Detailed CTMP. Such advisory speed limits may include, for example, a reduction from 30 mph to 20 mph near to schools and play parks, if such limits are not already in place.

Within construction sites and on-site temporary access and haul roads, the Contractor will also impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced roads and work areas.

5.9 Travel by Site Workers and Parking

The appointed Contractor will be responsible for mitigating the traffic impact of site workers travelling to working areas. These measures may include the provision of works mini-buses either from local pick-up points (such as staff accommodation) and/or from site car parking facilities to points of work (this may be of particular use during the construction of cable route where works areas are often situated away from the formal site accommodation/ site compounds). Relevant details will be incorporated into the Detailed CTMP.

To prevent nuisance and potential obstruction/ restriction of free traffic flows caused by vehicles parked around the site boundary construction staff using private vehicles to travel to and from site (commuting) will park their vehicles in designated construction site car parks and not on public roads within a two-mile radius of the site. The Contractor therefore will ensure adequate on-site parking is provided close the place of work where feasible. Should this not be possible (for example on parts of the cable routes), measures such as provision of works mini-buses to implement a 'park and ride' from larger construction site car parks (as described above) will be implemented to ensure compliance.

Parking of vehicles being used for construction purposes will be permitted on public roads within the limits of any traffic management scheme provided for the works.

As described in section 5.1, there may also be restrictions in the times that site worker traffic can use routes directly passing or passing close to sensitive areas, if required these will be agreed in advance with the relevant highway authority and described in the Detailed CTMP.

6. Monitoring and Compliance

Compliance with safety rules and the provisions of this CTMP are to be monitored and positive action taken if they are breached.

The public highway in the vicinity of site accesses, site accesses and temporary accesses will be inspected daily for the presence of site-related debris (mud); and the cleaning measures outlined in section 5.6. implemented where required.

Where practicable, vehicles should be fitted with trackers to demonstrate compliance with the CTMP. Where construction vehicles fail to adhere to the CTMP, there will be a two-strike/ red card policy. After two strikes, the haulage contractor will be removed from site.

Results of monitoring shall be documented in the monthly progress reports prepared for progress meetings.

The Contractor will provide details (postal and email address) of the named contacts to which all written complaints should be addressed and will also be responsible for the implementation of an appropriate system for logging and recording any complaints received. This log will be made available to the local authority if requested. A 24-hour free telephone complaints helpline will be established, and a project website may also be established. The key contact details and the head or regional office contact information of the Contractor/ construction company will be visible on boards placed around the perimeter of the construction site(s) in appropriate locations where they would be visible to the public. These details will also be provided to relevant departments of the local planning authority.

Any complaints received will be acknowledged within 24 hours during all hours when works, including deliveries, are taking place. The Contractor will ensure that all complaints receive a written response, including details of any action undertaken (if such action is deemed appropriate). The Contractor will provide NGET with a monthly report that details all complaints, who they were filed by and the actions taken.

Any complaints received will be investigated, with appropriate action taken and recorded, so that a full audit trail is available should the complainant raise the issue(s) with the local authority. The complainant would be provided with a response outlining the results of the investigation and any action taken.

Prior to works commencing, the Contractor(s) will be required to produce a detailed Construction Logistics Plan to manage the sustainable delivery of goods and materials. This will include provision for the management of delivery records. These will be kept at the site office. Delivery records will allow vehicular activities to be recorded, monitored and managed throughout the construction of the EOS to ensure compliance with the CTMP.

Additionally, as recording of waste movements (HGV/ skip waggons) are part of the Site's Duty of Care requirements, the number of vehicle movements associated with the construction of the English Onshore Scheme will also be recorded and kept in the site office.

Prior to the commencement of works, the Contractor will prepare a Traffic Incident Management Plan. This will set out emergency response measures, including reporting requirements, in the event of a traffic accident either on site, or involving site traffic on the public highway.