

National Policy Statement for Ports

Presented to Parliament pursuant to section 5(9) of the
Planning Act 2008

January 2012

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Any enquiries regarding this publication should be sent to the Department for Transport at FAX9643@dft.gsi.gov.uk.

This publication is available for download at www.official-documents.gov.uk.

This document is also available from the Department for Transport website at www.dft.gov.uk.

ISBN 9780108511196

Printed in the UK by The Stationery Office Limited
on behalf of the Controller of Her Majesty's Stationery Office

ID 2460827 01/12

Printed on paper containing 75% recycled fibre content minimum.

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1 Introduction

1.1 Background

- 1.1.1 Throughout history, British sea ports have developed, thrived and changed, supporting the free movement of people, and the trade in goods and commodities which is the basis for our national prosperity. As travel and trade have changed over time, and as ships and their cargoes have developed in size, character and technology, so the nature and the distribution of ports around our coasts and rivers has altered, creating new opportunities for local, regional and national growth.
- 1.1.2 Many of the changes have been unpredictable. But there are some constants. The need for safe harbours, with built defences interacting with and changing the natural environment. The need for unimpeded access, with water deep enough for the largest vessels expected to use the port requiring dredging on the sea bed. The risks of noise, dirt and danger associated with loading and unloading cargoes. And the impacts on our transport networks of the inland movement of goods to and from ports by road or rail.
- 1.1.3 The planning system is a key to the future development of ports. The Government is using the reforms enabled by the Planning Act 2008 and the Marine and Coastal Access Act 2009 to strengthen the system, making it more transparent, as well as offering greater certainty both to those who propose new developments and to people who wish to make representations on those proposals.

1.2 Role of this National Policy Statement in the planning system

- 1.2.1 This statement is part of the planning system established under the 2008 Act to deal with nationally significant infrastructure proposals. It is a National Policy Statement (NPS) and provides the framework for decisions on proposals for new port development. It is also a relevant consideration for the Marine Management Organisation, established in the Marine and Coastal Access Act 2009, which decides other port development proposals, and for local planning authorities where they have a role to play. It applies, wherever relevant, to associated development, such as road and rail links, for which consent is sought alongside that for the principal development. Non-ports associated development should be considered on a case-by-case basis, using appropriate assessment methods consistent with this NPS and with applicable official guidance.
- 1.2.2 Under the Planning Act 2008 the Infrastructure Planning Commission (IPC) must also have regard to any local impact report submitted by a relevant local authority, any relevant matters prescribed in regulations, the Marine Policy Statement (MPS) and any applicable Marine Plan, and any other matters which the IPC thinks are both important and relevant to its decision.
- 1.2.3 The Planning Act 2008 sets out the thresholds for nationally significant infrastructure projects (NSIPs) in the ports sector. Applications for development consent will be referred to the IPC if the estimated incremental annual capacity exceeds:

- 0.5 million teu¹ for a container terminal;
- 250,000 movements for roll-on roll off (ro-ro);
- 5 million tonnes for other (bulk and general) traffic; or
- a weighted sum equivalent to these figures taken together.

The Secretary of State may also refer to the IPC an application with capacity below the relevant threshold, if he/she considers that the project is of national significance (s.35 of the Act).

- 1.2.4** The NPS sets out the Government's conclusions on the need for new port infrastructure, considering the current place of ports in the national economy, the available evidence on future demand and the options for meeting future needs. It explains to planning decision-makers the approach they should take to proposals, including the main issues which, in the Government's view, will need to be addressed to ensure that future development is fully sustainable, as well as the weight to be given to the need for new port infrastructure and to the positive and negative impacts it may bring.
- 1.2.5** The IPC must decide an application for ports infrastructure in accordance with this NPS unless it is satisfied that to do so would:
- lead to the UK being in breach of its international obligations;
 - be in breach of any statutory duty that applies to the IPC;
 - be unlawful;
 - result in adverse impacts of the development outweighing its benefits;
 - be contrary to regulations about how the decisions are to be taken.²
- 1.2.6** The Department for Communities and Local Government has issued guidance on the role and operation of the IPC.³

1.3 Duration

- 1.3.1** The NPS will remain in place until it is withdrawn, amended or replaced. It will be reviewed, in accordance with the Planning Act, when the Secretary of State considers it appropriate to do so. When considering whether to review the NPS, the Secretary of State will look at whether there has been a significant change in any circumstances on which the policy was based and whether such change was anticipated when the NPS was designated.

1.4 Power of intervention

- 1.4.1** Where there has been a material change in circumstances which necessitates the review of the NPS, in whole or in part, and it is in the national interest that a case should be decided quickly, the Secretary of State has a reserve

¹ teu: twenty-foot equivalent unit.

² s.104 Planning Act 2008.

³ <http://www.communities.gov.uk/documents/planningandbuilding/pdf/1376507.pdf>

power⁴ to intervene and take the decision, ensuring that proposals for nationally significant infrastructure can be considered without delay.

1.5 Territorial extent

1.5.1 This NPS covers England and Wales.

1.5.2 The Scottish Executive has devolved responsibilities for ports, and has developed its own ports policy under the Scottish National Transport Strategy. Ports policy in Northern Ireland is also devolved. Statistical material, including forecasts of port freight traffic, covers Scotland and Northern Ireland, as well as England and Wales, and helps to inform ports policy there. The Channel Islands and dependent territories operate their own ports policies and are not covered in the forecasts.

1.5.3 Any reference below to the United Kingdom (UK) or Great Britain should be read as without prejudice to the devolved authority of the Scottish Executive, the Northern Ireland Assembly and dependent territories in ports matters.

1.6 Applications relating to Wales

1.6.1 As noted above, this NPS covers England and Wales, reflecting the fact that ports policy for Wales, other than for small fisheries harbours, is reserved to the UK Government.

1.6.2 The Welsh Government is, however, responsible for many related functions, including transport and land use planning. In considering any applications relating to Wales, the decision-maker should additionally take account of the Welsh Government's policies and plans in these areas. The key documents are the Wales Spatial Plan, the Wales Transport Strategy, the National Transport Plan and the four Regional Transport Plans published in 2009, *Planning Policy Wales 2011* and *Technical Advice Note 18: Transport* (or successor documents). For appraisals, the Welsh Government's WelTAG guidance should be referred to.

1.7 Appraisal of sustainability

1.7.1 The appraisal of the sustainability (AoS) of the policy set out in this NPS can be found on the Department for Transport (DfT) website. This describes analysis of policy alternatives, supporting the broad approach in the NPS, and assesses how the policies set out in the NPS will ensure that consented applications will satisfy the requirements of sustainable development. The revised AoS sets out the effects of amendments included in the final version of this NPS.

1.7.2 The AoS incorporates a Strategic Environmental Assessment (pursuant to Directive 2001/42/EC as transposed by SI 2004/1633⁵) in so far as relevant to a policy statement of this nature.

⁴ Part 6 Chapter 7 Planning Act 2008

⁵ The Environmental Assessment of Plans and Programmes Regulations 2004, SI 2004/1633, www.opsi.gov.uk/SI/si2004/20041633.htm

2 Localism Act 2011

2.1 Changes when the Localism Act enters into force

- 2.1.1** Aside from cases where the Secretary of State intervenes, or where the application is not covered by a designated NPS, the Planning Act 2008, as it is in force at the date on which this NPS was designated, provides that all applications for development consent will be both examined and determined by the Infrastructure Planning Commission (IPC). However, the commencement of the provisions of the Localism Act 2011 relating to the Planning Act will abolish the IPC and transfer its functions to the Secretary of State. The Government has announced that the functions of accepting and examining applications will be delegated to the Planning Inspectorate and the functions of determining applications on major ports infrastructure projects would return to the Secretary of State for Transport (who will receive a report and recommendation on each such application from the Inspectorate).
- 2.1.2** References in this NPS to the IPC should be read as follows from the date when the changes take effect. Any statement about the IPC in its capacity as an examining body should be taken to refer to the Inspectorate. Any statement about the IPC in its capacity as a decision-maker determining applications should be taken to refer to the Inspectorate (in respect of the role of making recommendations on applications to the Secretary of State for Transport) or to the Secretary of State for Transport in his/her capacity as decision-maker. The Inspectorate will have regard to such statements in framing reports and recommendations to the Secretary of State.

3 Government policy and the need for new infrastructure

3.1 The essential role of ports in the UK economy

3.1.1 Until the second half of the 20th century, nearly all movements of people and goods into and out of Britain were by sea, through our ports and harbours, with cargoes being unloaded largely by hand. The last 50 years have, however, seen major changes in several areas.

3.1.2 The development of air transport has brought radical change in international travel to and from the UK. Now nearly seven times as many visits abroad by UK residents are by air rather than by sea.⁶ The opening of the Channel Tunnel also created alternatives for people travelling abroad by rail or car. Overall in 2010, UK airports handled 172 million passengers travelling on international flights and there were a further 17 million passenger journeys through the Channel Tunnel.⁷ International sea passengers continue to represent a significant proportion, with 23 million travelling to and from UK ports in 2009.⁸

Freight and bulk movements

3.1.3 Fifty years ago, many cargoes were still loaded and unloaded individually. Most of our goods now arrive in trucks and trailers which roll on and off ('ro-ro'), or in large containers. Specialised equipment at terminals conveys grain and other dry goods and liquids ('non unitised flows') from tankers to on-shore pipelines. Alongside these changes the volume of freight and bulk movements has continued to grow. In the last 40 years freight traffic through UK ports increased by three-quarters. In 2010, ports in England and Wales handled 410 million tonnes of goods, out of a UK total of 512 million tonnes, representing about 95% of the total volume of UK trade and 75% of its value.

3.1.4 For an island economy, there are limited alternatives available to the use of sea transport for the movement of freight and bulk commodities. Air freight is often used for high-value items and express deliveries, and the Channel Tunnel has a significant role in freight as well as passenger transport. But these alternatives are constrained by the volumes that can practically be carried by air, by the capacity of the rail links through the tunnel and in the case of aviation by cost and environmental disadvantages. As a consequence, shipping will continue to provide the only effective way to move the vast majority of freight in and out of the UK, and the provision of sufficient sea port capacity will remain an essential element in ensuring sustainable growth in the UK economy.

⁶ Source: Travel Trends 2008 – International Passenger Survey.

⁷ Source: UK international short sea and Channel Tunnel passengers, 2011.

⁸ Source: Port Freight Statistics 2010.

Energy supplies

3.1.5 Ports have a vital role in the import and export of energy supplies, including oil, liquefied natural gas and biomass, in the construction and servicing of offshore energy installations and in supporting terminals for oil and gas pipelines. Port handling needs for energy can be expected to change as the mix of our energy supplies changes and particularly as renewables play an increasingly important part as an energy source. Ensuring security of energy supplies through our ports will be an important consideration, and ports will need to be responsive both to changes in different types of energy supplies needed (and to the need for facilities to support the development and maintenance of offshore renewable sites) and to possible changes in the geographical pattern of demand for fuel, including with the development of power stations fuelled by biomass within port perimeters.

Tourism and leisure

3.1.6 Sea ports play an important role in the tourism and leisure industries, supporting many different forms of economic and social activity, including passenger cruise liners, Channel ferries, sea going yachts and dinghies.

Wider economic benefits

3.1.7 Ports continue to play an important part in local and regional economies, further supporting our national prosperity. In addition to some 70,000 people estimated in 2010⁹ to be working on port related activities or on the port estate, indirect employment (supplying goods and services to companies engaged in port activity) and induced employment (associated with expenditure resulting from those who derive incomes from ports) ranged from 18,000 to 96,000. More recent studies have produced higher estimates.¹⁰ By bringing together groups of related businesses within and around the estate, ports also create a cluster effect, which supports economic growth by encouraging innovation and the creation and development of new business opportunities. And new investment, embodying latest technology and meeting current needs, will tend to increase the overall sector productivity.

3.2 The UK port sector

3.2.1 The UK ports sector is the largest in Europe, in terms of tonnage handled.¹¹ It comprises a variety of company, trust and municipal ports, all operating on commercial principles, independently of government, and very largely without public subsidy. The private sector operates 15 of the largest 20 ports by tonnage and around two-thirds of the UK's port traffic. Much of the tonnage handled is concentrated in a small number of ports, with the top 15 ports accounting for almost 80% of the UK's total traffic.

⁹ Port Employment and Accident Rates Survey: 2009/10, DfT, October 2010.

¹⁰ Oxford Economics for the BPA, UK Major Ports Group and Maritime UK industry group, 2011.

¹¹ British Ports Association.

3.3 Government policy for ports

3.3.1 In summary, the Government seeks to:

- encourage sustainable port development to cater for long-term forecast growth in volumes of imports and exports by sea with a competitive and efficient port industry capable of meeting the needs of importers and exporters cost effectively and in a timely manner, thus contributing to long-term economic growth and prosperity;
- allow judgments about when and where new developments might be proposed to be made on the basis of commercial factors by the port industry or port developers operating within a free market environment; and
- ensure all proposed developments satisfy the relevant legal, environmental and social constraints and objectives, including those in the relevant European Directives and corresponding national regulations.

3.3.2 This fundamental policy enables the Government to meet its external obligations and at the same time reflects that the ports industry has proved itself capable of responding to demand in this way.

3.3.3 In addition, in order to help meet the requirements of the Government's policies on sustainable development, new port infrastructure should also;¹²

- contribute to local employment, regeneration and development;
- ensure competition and security of supply;
- preserve, protect and where possible improve marine and terrestrial biodiversity;
- minimise emissions of greenhouse gases from port related development;
- be well designed, functionally and environmentally;
- be adapted to the impacts of climate change;
- minimise use of greenfield land;
- provide high standards of protection for the natural environment;
- ensure that access to and condition of heritage assets are maintained and improved where necessary; and
- enhance access to ports and the jobs, services and social networks they create, including for the most disadvantaged.

3.3.4 The reasons for pursuing these outcomes are largely self-explanatory. Moreover, effective infrastructure planning helps to enhance the quality of outcome that might not be realised with reliance on market forces alone.

3.3.5 And the Government wishes to see port development wherever possible:

- being an engine for economic growth;
- supporting sustainable transport by offering more efficient transport links with lower external costs; and

¹² Not in any priority order.

- supporting sustainable development by providing additional capacity for the development of renewable energy.

3.3.6 These underlying policies are intended to support the fundamental aim of improving economic, social and environmental welfare through sustainable development. They recognise the essential contribution to the national economy that international and domestic trade makes. Economic growth is supported by trade but must be aligned with environmental protection, social enhancement and improvement wherever possible. The policies set out below aim to ensure that future port development supports all these objectives.

3.3.7 In addition to the Government's priority of supporting economic growth, this statement takes full account of the Government's wider policy relating to climate change, both through mitigation and adaptation. It does so by recognising the contribution that port developments can make through good environmental design and by their position in the overall logistics chain. International and domestic shipping and inland transport will be subject to other policies and measures, addressing the issues more directly than planning decisions for new development. Section 4.12 discusses mitigation of impacts from port development, while 4.13 addresses adaptation.

3.3.8 The importance of achieving good design in port development is underlined at various points in the statement, with reference to various types of impacts discussed in section 5. Good design is fundamental to mitigating the adverse effects of development, as well as a means to deliver positive aesthetic qualities in an industrial setting.

3.4 The Government's assessment of the need for new infrastructure

3.4.1 The total need for port infrastructure depends not only on overall demand for port capacity but also on the need to retain the flexibility that ensures that port capacity is located where it is required, including in response to any changes in inland distribution networks and ship call patterns that may occur, and on the need to ensure effective competition and resilience in port operations. These factors are considered further below.

Demand forecasts

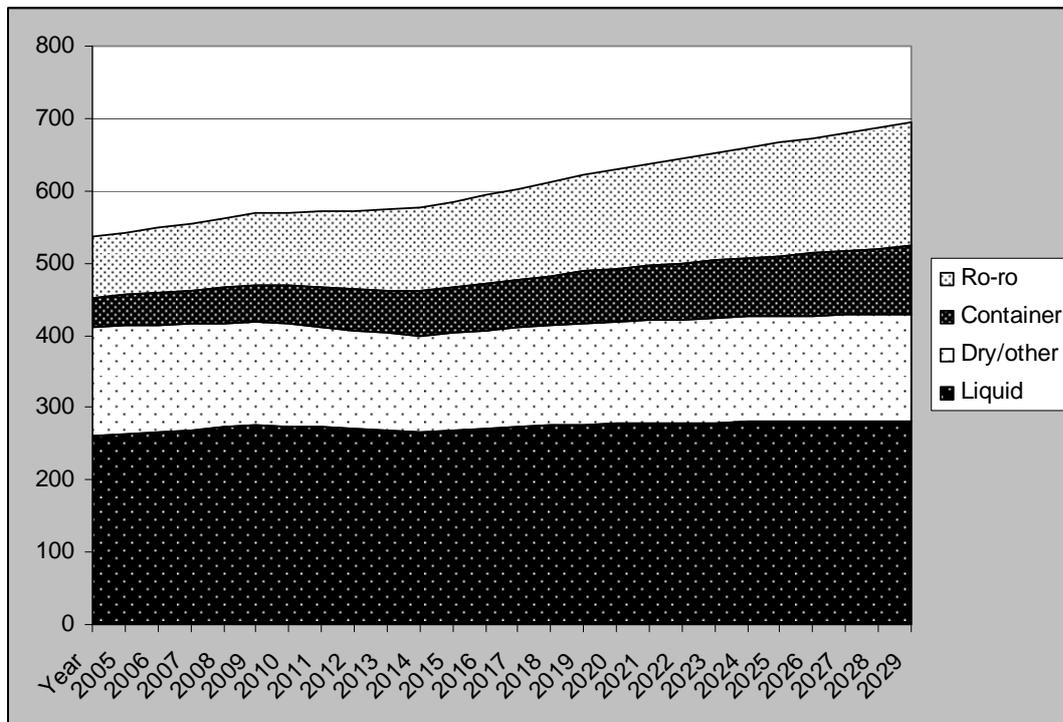
3.4.2 Over time and notwithstanding temporary economic downturns, increased trade in goods and, to a lesser extent in commodities, can be expected as a direct consequence of the Government's policies to support sustainable economic growth and to achieve rising prosperity. With 95% of all goods in and out of the UK moving by sea and very limited alternatives, the majority of this increase will need to move through ports around the coast of the United Kingdom.

3.4.3 Forecasts of demand for port capacity in the period up to 2030 by MDS Transmodal (MDST) were published on behalf of the Department for Transport in 2006 and updated in 2007 (Figure 1). The central GB-wide forecasts suggested increases by 2030 over a 2005 base¹³ of:

¹³ http://www.dft.gov.uk/pgr/shippingports/ports/portspolicyreview/207015_Final_Report_2.pdf

- 182% in containers, from 7m to 20m teu¹⁴ (excluding transshipment);
- 101% in ro-ro traffic, from 85m to 170m tonnes; and
- 4% in non-unitised traffic, from 411m to 429m tonnes.

Figure 1: MDS Transmodal central 2007 forecast of GB port freight demand, million tonnes



3.4.4 Since then, recession has led to a severe downturn in demand, especially for unitised cargo. The full extent of this recession effect on trade through ports still cannot be fully quantified, although early attempts have been made by some to do so. However, the Government's view is that the long-term effect will be to delay by a number of years but not ultimately reduce the eventual levels of demand for port capacity, in particular for unitised goods, predicted in these forecasts.

3.4.5 In addition, the UK is the global leader for offshore wind with 1.5 GW of operational capacity. In the *UK Renewable Energy Roadmap (2011)* Government has indicated that, in its central scenario, up to 18 GW could be deployed by 2020, with a high potential for further deployment by 2030. The manufacturing and assembly of large-scale equipment to serve the offshore energy sector within port sites in the UK is set to see significant increase in demand as a result. This is in addition to port capacity needed to provide installation, operation and maintenance facilities for this scale of deployment.

¹⁴ teu: twenty-foot equivalent unit, the standard measure of container capacity. Around two-thirds of containers are 40 feet long, and are classed as 2 teu each. Forecast increase in container tonnage over the period is 40,000 to 94,000 tonnes (136%).

- 3.4.6** The Government may from time to time commission new port freight demand forecasts to be published on its behalf. These new forecasts would then replace the 2006–07 MDS forecasts, and the commentary in the preceding paragraph may be subject to some change in the light of them. It is intended to commission forecasts by 2012.
- 3.4.7** The Government does not, however, expect that any new forecasts will prompt any change in its policy: that it is for each port to take its own commercial view and its own risks on its particular traffic forecasts. The purpose of the national forecasts will, unless expressly stated otherwise as part of a review of the NPS under section 6 of the Act, remain as only to help set the context of overall national capacity need, alongside competition and resilience considerations as set out below.
- 3.4.8** Since 2005, consents have been granted for a number of container port developments which, if completed as planned, would provide substantial additional container throughput:
- The Port of Felixstowe handled 3.0 million teu in 2009. Consent granted in February 2006 would provide capacity for an estimated further 1.6 to 2 million teu at Felixstowe South, and the first phase of this development has begun;
 - Bathside Bay (Harwich): consent granted March 2006 would provide capacity for an estimated 1.7 million teu per annum, though this development is not expected to proceed for some years;
 - London Gateway: consent granted June 2007 would allow capacity for an estimated 3.5 million teu per annum;
 - Teesport, handled 0.18 million teu in 2009. Consent granted February 2008 would provide capacity for a further 1.5 million teu;
 - Liverpool handled 0.6 million teu in 2009. Consent granted March 2007 would allow capacity for around a further 0.6 million teu;
 - Bristol handled 0.07 million teu in 2009. Consent granted September 2010 will allow an estimated further 1.5 million teu; and
 - Southampton, which handled 1.4 million teu in 2009, has advanced plans to expand terminal capacity within its existing development rights, which could ultimately provide capacity estimated at an additional 1.7 million teu.
- 3.4.9** If all the above development were to be built, aggregate container capacity would be broadly in line with the pre-recession forecast for demand over the next 20 years or so. However, the extent, and speed, with which these developments proceed in reality will depend upon the commercial judgements of the developers at the time. There may therefore be opportunities for other developers to bring forward proposals for alternative or additional developments that satisfy demand that these consented developments are not meeting, as well as a continuing requirement for further new container capacity to meet anticipated longer term growth. Thus, the capacity needed to provide for competition, innovation, flexibility and

resilience can be delivered by the market and is likely to exceed what might be implied by a simple aggregation of demand nationally.

- 3.4.10** Since the 2006–07 forecasts, it has become evident that demand for port capacity to service manufacture, operation and maintenance of offshore windfarms will be substantial, especially in the short term in support of the 'Round 3' offshore developments. To some extent, capacity provided for by container terminal consents may help to contribute, on an interim basis, to meeting this demand. Because of the Government's renewables targets and in light of the policies set out in the Renewable Energy NPS (EN-3), there is a strong public interest in enabling ports to service these developments. Benefits from such developments may include social and economic advantages from attracting business to the UK that would otherwise locate abroad, as well as avoiding transport by road of abnormal loads.

Location of development

- 3.4.11** Capacity must be in the right place if it is to effectively and efficiently serve the needs of import and export markets. The location of ports in England and Wales has changed over time, in response to changes in global markets, in the size and nature of ships, and in the transport networks which support them. Currently, the largest container and ro–ro terminals are in the South East, while the west coast has naturally been best placed to meet the needs of transatlantic and Irish traffic. Recent consents for container developments have been in or near deepwater ports in the main coastal estuarial locations. But it is not possible to anticipate future commercial opportunities. New shipping routes and technologies may emerge. The needs of trading partners may change as their economic circumstances develop. So capacity needs to be provided at a wide range of facilities and locations, to provide the flexibility to match the changing demands of the market, possibly with traffic moving from existing ports to new facilities generating surplus capacity.
- 3.4.12** The forecasts produced by MDS on behalf of DfT did not attempt to predict the locations where demand would manifest, partly because this is dependent on changes in the market, which are difficult to predict now. For the same reason, the Government does not wish to dictate where port development should occur. Port development must be responsive to changing commercial demands, and the Government considers that the market is the best mechanism for getting this right, with developers bringing forward applications for port developments where they consider them to be commercially viable.

Competition

- 3.4.13** UK ports compete with each other, as well as with neighbours in continental Europe, as primary destinations for long haul shipping, as stops for ships making shorter journeys to and from Europe, along UK coasts and as bases for terminals and associated infrastructure. The Government welcomes and encourages such competition. Competition drives efficiency and lowers costs for industry and consumers, so contributing to the competitiveness of the UK economy. Effective competition requires sufficient spare capacity to ensure real choices for port users. It also requires ports to operate at

efficient levels, which is not the same as operating at full physical capacity. Demand fluctuates seasonally, weekly and by time of day, and some latitude in physical capacity is needed to accommodate such fluctuations. The most efficient form of operation also depends on location – the configuration, availability and cost of land – and the availability and cost of labour. These factors may mean that total port capacity in any sector will need to exceed forecast overall demand if the ports sector is to remain competitive. The Government believes the port industry and port developers are best placed to assess their ability to obtain new business and the level of any new capacity that will be commercially viable, subject to developers satisfying decision-makers that the likely impacts of any proposed development have been assessed and addressed.

Coastal shipping

3.4.14 Ports can make a valuable contribution to decongestion and to the environment, as well as commercial gain, by facilitating coastal shipping as a substitute for inland freight transport (especially by road haulage) of various commodities. This can mean reduced emissions of pollutants per tonne-mile, with those emissions, and noise, at the same time having much less effect on people close to the transport arteries. Coastal shipping is expected to grow, and developers are expected to provide suitable facilities on a commercial basis, again subject to dealing appropriately with impacts.

Resilience

3.4.15 Spare capacity also helps to assure the resilience of the national infrastructure. Port capacity is needed at a variety of locations and covering a range of cargo and handling facilities, to enable the sector to meet short-term peaks in demand, the impact of adverse weather conditions, accidents, deliberate disruptive acts and other operational difficulties, without causing economic disruption through impediments to the flow of imports and exports. Given the large number of factors involved, the Government believes that resilience is provided most effectively as a by-product of a competitive ports sector.

Conclusion

3.4.16 Against this background, and despite the recent recession, the Government believes that there is a compelling need for substantial additional port capacity over the next 20–30 years, to be met by a combination of development already consented and development for which applications have yet to be received. Excluding the possibility of providing additional capacity for the movement of goods and commodities through new port development would be to accept limits on economic growth and on the price, choice and availability of goods imported into the UK and available to consumers. It would also limit the local and regional economic benefits that new developments might bring. Such an outcome would be strongly against the public interest.

3.5 Guidance to the decision-maker on assessing the need for additional capacity

3.5.1 For the reasons set out above, when determining an application for an order granting development consent in relation to ports, the decision-maker should accept the need for future capacity to:

- cater for long-term forecast growth in volumes of imports and exports by sea for all commodities indicated by the demand forecast figures set out in the MDST forecasting report accepted by Government, taking into account capacity already consented. The Government expects that ultimately all of the demand forecast in the 2006 ports policy review is likely to arise, though, in the light of the recession that began in 2008, not necessarily by 2030;
- support the development of offshore sources of renewable energy;
- offer a sufficiently wide range of facilities at a variety of locations to match existing and expected trade, ship call and inland distribution patterns and to facilitate and encourage coastal shipping;
- ensure effective competition among ports and provide resilience in the national infrastructure; and
- take full account of both the potential contribution port developments might make to regional and local economies.

3.5.2 Given the level and urgency of need for infrastructure of the types covered as set out above, the IPC should start with a presumption in favour of granting consent to applications for ports development. That presumption applies unless any more specific and relevant policies set out in this or another NPS clearly indicate that consent should be refused. The presumption is also subject to the provisions of the Planning Act 2008.

3.5.3 Advice on how to assess the impacts of developments that might meet these planning policies is provided through the guidance on assessment of the impacts of proposed development in section 5 of this NPS.

4 Assessment principles

4.1 **Key considerations**

4.1.1 In making decisions on proposals for individual port developments, the planning decision-maker should take account of the following key considerations:

- the applicant's assessment should be conducted in a manner that is consistent with statutory requirements under UK and EU legislation;
- the applicant's assessment should be conducted in a way that takes into account all of the Government's objectives for transport, including the need:
 - to promote economic growth through improving networks and links for passengers and freight, as well as ensuring an efficient and competitive transport sector both nationally and internationally;
 - to create a cleaner and greener transport system through improving the environmental performance of ports and associated developments, including transport, as well as to help changing to support infrastructure needed for green technologies; and
 - to strengthen the safety and security of transport;
- the applicant's assessment could follow the standard framework designed by the DfT and recommended to all port applicants (*A Project Appraisal Framework for Ports, 2005*¹⁵), which allows all the material considerations to be taken into account in a systematic manner using both quantitative and qualitative indicators;
- the applicant's assessment should take account of other relevant UK policies and plans, including the Marine Policy Statement (MPS)¹⁶ and any existing marine plans provided for by the Marine and Coastal Access Act 2009. The decision-maker must have regard to these in taking any decision which relates to the exercise of any function capable of affecting the whole or any part of the UK marine area. To avoid conflict between plans, marine plans will need to be in accordance with the NPS for purposes of decision making, given the national significance of the infrastructure;
- the assessment should also be informed, as to the material points for consideration, by the points raised by s.42 consultees;
- information sought from applicants should be proportionate to the scale of proposed development and associated impacts, including its likely impact on and vulnerability to climate change, as well as all other aspects of conformity with this NPS; and

¹⁵ <http://www.dft.gov.uk/adobepdf/165220/193697/projectappraisalframeworkmaindoc>

¹⁶ <http://archive.defra.gov.uk/environment/marine/documents/interim2/marine-policy-statement.pdf>

- for applications relating to Wales, the decision-maker should take account of the Welsh Government's policies and plans in relevant devolved areas, particularly in respect of transport and planning.

4.1.2 Most of the guidance below will apply to all decision-makers. Where intended to apply specifically to the IPC, it is specifically mentioned.

4.2 **Consideration of benefits and impacts**

4.2.1 In this NPS, the terms 'effects', 'impacts' or 'benefits' should be understood to mean likely significant effects, impacts or benefits.

4.2.2 Where the decision-maker reaches the view that a proposal for port infrastructure is in accordance with this NPS, it will then have to weigh the suggested benefits, including the contribution that the scheme would make to the national, regional or more local need for the infrastructure, against anticipated adverse impacts, including cumulative impacts.

Benefits

4.2.3 Economic, environmental and social benefits could include those identified in the NPS at a national level, as well as local benefits identified at the project-specific level. The decision-maker should ensure they take account of any longer-term benefits that have been identified (such as job creation) as well as the costs of development, or any wider benefits to national, regional or local economies, environment or society.

Adverse impacts

4.2.4 Adverse impacts may be identified in a number of ways: in the local impact report which relevant local authorities are invited to submit following the acceptance of an application; in an Environmental Statement which accompanies an application; or in written or oral representations made. The NPS in broad terms ascribes weight to be applied to benefits or impacts, including multiple and cumulative impacts of projects, and the decision-maker must take these into account in reaching the decision. The precise nature of the impact will, however, vary depending on a number of factors, including matters such as, for example, the type of infrastructure, the specific location of the proposed project, heritage assets and the local geology or biodiversity.

4.3 **Economic impacts: general overview**

4.3.1 Ports enable international trade, including essential imports, and so contribute to enhancing gross national product. They provide opportunities for foreign direct investment. They generate tax revenues for the Exchequer and for local government.

4.3.2 At regional and local level, economic benefits from port developments include regeneration and employment opportunities. As commercial developments, ports can also generate agglomeration effects by bringing together businesses, with varying degrees of mutual interaction, and producing economic benefits over and above those reflected in the value of transactions among those businesses.

4.3.3 Ports can contribute to the enhancement of people's skills and of technology, as embodied in equipment used by ports and port-related activities, with wider longer-term benefits to the economy.

Guidance for the decision-maker

4.3.4 The AoS accompanying this NPS assesses the broad nature and scale of these effects in relation to port development generally. The decision-maker may need also to quantify the benefits of an individual application. For example:

- in cases where a port development affects a protected habitat, and in the absence of alternative solutions, the decision-maker may need to consider whether there are any imperative reasons of overriding public interest (IROPI) in allowing the development to proceed. In such circumstances, the contribution the development will make toward meeting the national demand for port capacity, as set out in the most up-to-date forecasts available, will provide a partial estimate for the national economic benefits offered by the development. See section 5.1 on biodiversity impacts;
- in considering whether to reject an application on the grounds that the adverse effects outweigh the benefits, the decision-maker should take into account positive economic externalities. In these circumstances, an assessment using WebTAG¹⁷ economic impact methodology and the *Project Appraisal Framework for Ports* may be undertaken, which should indicate the degree of weight attaching to these elements. If such an assessment is not feasible, a qualitative assessment may be made. The weight attached to benefits should take account of the level of uncertainty and must avoid double counting, for example by scoring net benefits in one region while ignoring net losses elsewhere. External effects remote from the development in space, nature of activity or time are likely to be uncertain;
- where a port development is likely to lead to a substantial net increase in employment (of 5,000 or more) which would require inward migration to the area, the effect on demand for local public services (such as affordable housing, education and healthcare) should be assessed.

4.3.5 The decision-maker should give substantial weight to the positive impacts associated with economic development, in line with the policy set out in this NPS.

4.3.6 Expansion of the ports sector through market-oriented investment may stimulate extra employment and training benefits which, as noted above, may be taken into account in accordance with WebTAG, WeITAG where applicable and the *Project Appraisal Framework for Ports*.

¹⁷ WebTAG: DfT website containing transport appraisal guidance. See <http://www.dft.gov.uk/webtag/>. The equivalent for Wales is WeITAG, which should be referred to for projects in Wales (<http://wales.gov.uk/topics/transport/publications/welitag/?lang=en>).

4.3.7 Transport congestion and its mitigation, as well as costs to hauliers, are recognised as economic issues, but transport impacts are bracketed together under environmental impacts at 5.4 below for ease of presentation.

4.4 Commercial impacts

4.4.1 Ports in England and Wales operate on commercial lines, without public subsidy and with investment from their own operating profits or from the private sector investors. Port developers must therefore plan to make a commercial return from the investment being made. The decision-maker may need to make judgements as to whether possible adverse impacts would arise from the impact of the development on other commercial operators.

Guidance for the decision-maker

4.4.2 In cases where the adverse impacts would only arise in the event of the success of the project (e.g. through the increased traffic generated by a thriving development), the decision-maker should consider the adequacy of the mitigation proposed in such an event, rather than the likelihood of the impact arising.

4.4.3 Objections from port users adversely affected by the development should be considered in the light of the proposal from the applicant to mitigate those impacts, taking into account any benefits the decision-maker believes, on the evidence presented, will accrue to those users from the development.

4.5 Competition

4.5.1 In some cases, particularly if port developments are occurring in parallel, it may be necessary to make some assessment of the effects of competition in assessing the demand on inland access links and on the phasing of road, rail and other infrastructure demands. This is discussed further in section 5.4 on transport.

4.6 Tourism

4.6.1 Port developments that include a passenger or cruise terminal may have a positive impact on tourism in the local area by increasing accessibility, particularly in outlying regions. This should be taken into account in assessing the overall benefits. Where increased tourism is likely significantly to affect demand for local services, this impact should be assessed. Additional benefit should also be identified through promoting the historical legacy of working ports; this is important in terms of the changing economic life of ports and how such change is compatible with conserving heritage assets.

4.6.2 Port development may have an adverse impact on tourism, for example if it severs or diverts footpaths or bridleways, has a detrimental impact on the surrounding landscape or seascape, or affects the space available for local leisure activities such as windsurfing or wildfowling. (See section 5.13 on open space.)

Applicant's assessment

- 4.6.3** The WebTAG methodology (and WelTAG in Wales) for appraisal of wider economic impacts may be used where tourism benefits or adverse impacts appear potentially significant.

Mitigation

- 4.6.4** Good design can deliver benefits for tourism and minimise any adverse impacts.

- 4.6.5** Good environmental quality of water bodies and beaches may also support local tourism and associated businesses, supporting the weight that should be attached to fulfilment of Water Framework Directive requirements.

4.7 Environmental Impact Assessment

- 4.7.1** All proposals for projects that are subject to the European Environmental Impact Assessment Directive¹⁸ must be accompanied by an Environmental Statement (ES) describing the aspects of the environment likely to be significantly affected by the project.¹⁹ The Directive specifically covers 'trading ports...which can take vessels over 1,350 tonnes' within Annex I 8(b) and 'construction of...harbours and port installations, including fishing harbours (projects not included in Annex I)' within Annex II 10(e). The Directive also specifically refers to effects on human beings, fauna and flora, soil, water, air, climate, the landscape, material assets and cultural heritage, and the interaction between them. The Directive requires a description of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, short-, medium- and long-term, permanent and temporary, positive and negative effects of the project, and also of the measures envisaged for avoiding or mitigating significant adverse effects.²⁰ When considering a proposal, the decision-maker should ensure that likely significant effects at all stages of the project have been adequately assessed and should request further information where necessary.
- 4.7.2** To consider the potential effect, including benefits of a proposal for a project, the decision-maker will find it helpful if the applicant also sets out information on the likely significant social and economic effects of the development and shows how any likely significant negative effects would be avoided or mitigated. This information could include matters such as employment, equality, community cohesion and well-being.
- 4.7.3** When considering cumulative effects, the ES should provide information on how the effects of the applicant's proposal would combine and interact with the effects of other development (including projects for which consent has

¹⁸ Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, amended by Directives 97/11/EC and 2003/35/EC.

¹⁹ See transposing regulations, SI 1999/293 <http://www.opsi.gov.uk/si/si1999/19990293.htm> as amended.

²⁰ See Circular 02/99: *Environmental Impact Assessment* for further information on the preparation and content of an Environmental Statement.

been sought or granted, as well as those already in existence).²¹ The decision-maker may also have other evidence before it, for example from appraisals of sustainability of relevant NPSs or development plans, on such effects and potential interactions. Any such information may assist the decision-maker in reaching decisions on proposals and on mitigation measures that may be required.

4.7.4 The IPC should consider how the accumulation of, and interrelationship between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.

4.7.5 To help the decision-maker consider thoroughly the potential effects of a proposed project in cases where the EIA Directive does not apply to a project, and an ES is not therefore required, the applicant should instead provide information proportionate to the project on the likely significant environmental, social and economic effects. References to an ES in this NPS should be taken as including a statement which provides this information, even if the EIA Directive does not apply.

4.8 Habitats and Species Regulations Assessment

4.8.1 Prior to granting a development consent order, the decision-maker must, under the Habitats and Species Regulations,²² consider whether the project may have a significant effect on a European site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects. Further information on the requirements of the Habitats and Species Regulations can be found in a Government Circular,²³ Applicants should also refer to section 5.1 on biodiversity and geological conservation. The applicant should seek the advice of Natural England and/or the Countryside Council for Wales and provide the decision-maker with such information as it may reasonably require to determine whether an appropriate assessment is required. In the event that appropriate assessment is required, the applicant must provide the decision-maker with such information as may reasonably be required to enable it to conduct the appropriate assessment. This should include information on any mitigation measures that are proposed to minimise or avoid likely effects.

4.9 Alternatives

4.9.1 In any planning case, the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to the

²¹ For guidance on the assessment of cumulative effects, see, for example, Circular 02/99, *Environmental Impact Assessment, or Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions* (<http://ec.europa.eu/environment/eia/eia-studies-and-reports/guidel.pdf>).

²² The Conservation (Natural Habitats, &c.) Regulations 2010 (SI 2010/490)

²³ Government Circular: *Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System* (ODPM 06/2005, Defra 01/2005) available via TSO website www.tso.co.uk/bookshop. It should be noted that this document does not cover more recent legislative requirements. Where this Circular has been superseded, reference should be made to the latest successor document.

proposed development is in the first instance a matter of law, detailed guidance on which falls outside the scope of this NPS. From a policy perspective this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option.

4.9.2 However:

- applicants are obliged to include in their ES factual information about the main alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility; and
- in some circumstances there are specific legislative requirements, notably under the habitats Directive, for the applicant and decision-maker to consider alternatives. These should also be identified in the ES by the applicant.

4.9.3 Where there is a legal requirement to consider alternatives, the applicant should describe the alternatives considered in compliance with these requirements. Given the public interest in provision of new port infrastructure, the decision-maker should, subject to any relevant legal requirements (e.g. under the habitats Directive) which may indicate otherwise, be guided by the following principles when deciding what weight should be given to alternatives:

- the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner;
- whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security and climate change benefits) in the same timescale as the proposed development;
- the decision-maker should not reject an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site, and it should have regard as appropriate to the possibility that other suitable sites for port infrastructure of the type proposed may be needed for future proposals;
- alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that the decision-maker thinks they are both important and relevant to its decision;
- if the IPC, which must (subject to the exceptions set out in the 2008 Act) decide an application in accordance with the relevant NPS, concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in this NPS, the existence of that alternative is unlikely to be important and relevant to the IPC's decision;
- suggested alternative proposals which mean the primary objectives of the application could not be achieved, for example because the

alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the decision;

- it is intended that potential alternatives to a proposed development should, wherever possible, be identified before an application is made in respect of it (so as to allow appropriate consultation and the development of a suitable evidence base in relation to any alternatives which are particularly relevant). Where, therefore, an alternative is first put forward by a third party after an application has been made, the person considering that application may place the onus on the person proposing the alternative to provide the evidence for its suitability as such, and the applicant should not necessarily be expected to have assessed it.

4.10 Criteria for 'good design' for port infrastructure

- 4.10.1** The visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. The functionality of an object – be it a building or other type of infrastructure – including fitness for purpose and sustainability, is equally important. Applying 'good design' should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however, that the nature of much port infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area.
- 4.10.2** Good design is also a means by which many policy objectives in the NPS can be met, for example the impact sections show how good design and use of appropriate technologies can help mitigate adverse impacts such as noise.
- 4.10.3** In the light of the above, and given the importance which the Planning Act 2008 places on good design and sustainability, the decision-maker needs to be satisfied that port infrastructure developments are sustainably designed and, having regard to regulatory and other constraints, are as attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be. In so doing, the decision-maker should satisfy itself that the applicant has taken into account both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located) as far as possible. Whilst the applicant may have no or very limited choice in the physical appearance of some port infrastructure, there may be opportunities for the applicant to demonstrate good design relative to existing landscape character, landform and vegetation.
- 4.10.4** Applicants should be able to demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected. In considering applications, the decision-maker should take into account the

ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements which the design has to satisfy.

- 4.10.5** At an early stage, applicants and the decision-maker should consider seeking professional and independent advice on what constitutes 'good design' of a proposal.

4.11 Pollution control and other environmental regulatory regimes

- 4.11.1** Issues relating to discharges or emissions from a proposed project which affect air quality, water quality, land quality and the marine environment, or which include noise and vibration, may be subject to separate regulation under the pollution control framework or other consenting and licensing regimes.
- 4.11.2** The planning and pollution control systems are separate but complementary. The planning system controls the development and use of land in the public interest. It plays a key role in protecting and improving the natural environment, public health and safety, and amenity, for example by attaching requirements to allow developments which would otherwise not be environmentally acceptable to proceed, and preventing harmful development which cannot be made acceptable even through requirements. Pollution control is concerned with preventing pollution through the use of measures to prohibit or limit to the lowest practicable level the releases of substances to the environment from different sources. It also ensures that ambient air and water quality meet standards that guard against impacts to the environment or human health.
- 4.11.3** In considering an application for development consent, the decision-maker should focus on whether the development itself is an acceptable use of the land and on the impacts of that use, rather than the control of processes, emissions or discharges themselves. The decision-maker should work on the assumption that the relevant pollution control regime, other environmental regulatory regimes, including those on land drainage, water abstraction and biodiversity will be properly applied and enforced by the relevant regulator. It should act to complement but not seek to duplicate it.
- 4.11.4** The applicant should consult the Marine Management Organisation (MMO) in England, or the Welsh Government in Wales on nationally significant projects which would affect, or would be likely to affect, any relevant marine areas as defined in the Planning Act 2008 (as amended by s.23 of the Marine and Coastal Access Act 2009). The development consent may include a deemed marine licence, and the MMO will advise on what conditions should apply to the deemed marine licence. The decision-maker and MMO (or the Welsh Government) should co-operate closely to ensure that nationally significant infrastructure projects are licensed in accordance with any relevant draft or adopted marine plan, as well as environmental legislation, including European directives.
- 4.11.5** Projects covered by this NPS may be subject to the Environmental Permitting²⁴ regime, which also incorporates operational waste management

²⁴ See The Environmental Permitting (England and Wales) Regulations 2010, SI 2010/675, <http://www.legislation.gov.uk/uksi/2010/675/contents/made> .

requirements for certain activities. When a developer applies for an Environmental Permit, the relevant regulator (usually the Environment Agency, but sometimes the local authority) requires that the application demonstrates that processes are in place to meet all relevant Environmental Permitting requirements. In considering the impacts of the project, the decision-maker may wish to consult the regulator on any management plans that would be included in an Environmental Permit application.

4.11.6 Applicants are advised to make early contact with relevant regulators, including the Environment Agency (EA) or the Welsh Government, and the MMO, to discuss their requirements for environmental permits and other consents. This will help ensure that applications take account of all relevant environmental considerations and that the relevant regulators are able to provide timely advice and assurance to the decision-maker. Wherever possible, applicants are encouraged to submit applications for Environmental Permits and other necessary consents at the same time as applying to the decision-maker for development consent.

4.11.7 The decision-maker should be satisfied that development consent can be granted, taking full account of environmental impacts. This will require close co-operation with the Environment Agency and/or the pollution control authority, the Welsh Government and other relevant bodies, such as the MMO, Natural England or the Countryside Council for Wales, Drainage Boards and water and sewerage undertakers, to ensure that, in the case of potentially polluting developments:

- the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework; and
- the effects of existing sources of pollution in and around the site are not such that the cumulative effects of pollution when the proposed development is added would make that development unacceptable, particularly in relation to statutory environmental quality limits.

4.11.8 The decision-maker should not refuse consent on the basis of regulated impacts unless it has good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted.

4.12 Climate change mitigation

4.12.1 Port developments may have an effect on greenhouse gases, particularly through their impact on sea and road transport. This impact may be positive, if the development results in transmodal shifts from road to shipping (including coastal shipping) or to rail transport, and the benefits from these shifts are greater than any additional emissions that may be associated with the proposed development.

Applicant's assessment: shipping

4.12.2 Given the international nature of shipping and the difficulties in estimating and attributing greenhouse gas emissions from ships, measures to address emissions from ships on international journeys are currently being taken

forward on an international basis and are not included in the national targets recommended by the Committee on Climate Change.

Guidance for the decision-maker

- 4.12.3** The decision-maker does not need to consider the impact of a new port development on greenhouse gas emissions from ships transiting to and from the port.
- 4.12.4** **Emissions from ships in ports** are unlikely to be significant contributors to climate change but, where an Environmental Statement is required, it should set out any measures taken to minimise the local effect of emissions and how these are likely to affect greenhouse gases.
- 4.12.5** **Inland transport.** Where a development will lead to significant increases in inland transport needs, the estimated impact on CO₂, and other greenhouse gases if significant, will need to be covered in the Environmental Statement. A transport assessment will also normally be required. See section 5.4 and NATA/WebTAG (and, in Wales, WeTAG) guidance.
- 4.12.6** The decision-maker should attach limited weight to the estimated likely net carbon emissions performance of port developments. However, it may be appropriate to agree requirements or obligations that will cement cost-effective ways to minimise greenhouse gas emissions in operation. Consent might be withheld if the applicant refused to accept reasonable requirements or obligations related to design, or arising from the transport assessment (again see section 5.4 on transport).

Mitigation

- 4.12.7** Good design can minimise emissions, and new developments should be designed with a view to fuel efficiency in the operation of buildings and of outdoor plant and machinery, as well as with the maximum use of renewable energy sources.
- 4.12.8** The decision-maker should consider the extent to which the applicant has considered the use of renewable energy on the port estate. Where renewable energy is not planned to be used for a major port development, the reasons should be scrutinised.
- 4.12.9** Inter-tidal habitat creation could be one way of offsetting emissions, as well as complying with habitats Regulations where appropriate.
- 4.12.10** The provision of shore-side fixed electrical power to replace the use of ships' generators in port ('cold ironing') may reduce carbon emissions, but the effects will be small. Paragraph 5.7.13 offers more detail on cold ironing.

4.13 Climate change adaptation

- 4.13.1** Section 10(3)(a) of the Planning Act requires the Secretary of State to have regard to the desirability of mitigating, and adapting to, climate change in designating an NPS.
- 4.13.2** Section 4.12 of this NPS covers climate change mitigation. While climate change mitigation is essential to minimise the most dangerous impacts of climate change, previous global greenhouse gas emissions have already

committed us to some degrees of continued climate change for at least the next 30 years.

- 4.13.3** Climate change is likely to mean that the UK will experience hotter, drier summers and warmer, wetter winters. There is a likelihood of increased flooding, drought, heat-waves, intense rainfall events and other extreme events such as storms, as well as rising sea levels. Adaptation is therefore necessary to deal with the potential impacts of these changes that are already happening.
- 4.13.4** To support planning decisions, the Government produces a set of UK Climate Projections and is developing a statutory National Adaptation Programme.²⁵ In addition, the Government's Adaptation Reporting Power²⁶ will ensure that reporting authorities (a defined list of public bodies and statutory undertakers, including port operators) assess the risks to their organisation presented by climate change. The decision-maker may take into account reports from port operators to the Secretary of State when considering adaptation measures proposed by an applicant for new port infrastructure.
- 4.13.5** In certain circumstances, measures implemented to ensure a port can adapt to climate change may give rise to additional impacts, e.g. as a result of protecting against flood risk there may be consequential impacts on coastal change.

Applicant's assessment

- 4.13.6** New port infrastructure will typically be long-term investments which will need to remain in operation over many decades, in the face of a changing climate. Consequently, applicants must consider the impacts of climate change when planning the location, design, build and operation of new port infrastructure. Proposals that are subject to the European Environmental Impact Assessment Directive must be accompanied by an Environmental Statement (ES) describing the aspects of the environment likely to be significantly affected by the project. The ES should set out how the proposal will take account of the projected impacts of climate change. While not required by the EIA Directive, this information will be needed by the decision-maker.
- 4.13.7** Applicants should use the latest set of UK Climate Projections²⁷ to ensure they have identified appropriate adaptation measures. Applicants should apply, as a minimum, the emissions scenario that the independent Committee on Climate Change suggests the world is currently most closely following – and the 10%, 50% and 90% estimate ranges. These results should be considered alongside relevant research which is based on the climate change projections such as Environment Agency (EA) Flood Maps.
- 4.13.8** In addition, where port infrastructure has safety-critical elements (e.g. storage of gas, petro-chemicals) the applicant should apply the high

²⁵ s.58 of the Climate Change Act 2008.

²⁶ s.62 of the Climate Change Act 2008.

²⁷ See <http://ukclimateprojections.defra.gov.uk>

emissions scenario (high impact, low likelihood) to those elements critical to the safe operation of the port infrastructure.

Guidance for the decision-maker

- 4.13.9** The decision-maker should satisfy itself that applicants for new port infrastructure have taken into account the potential impacts of climate change using the latest UK Climate Projections available at the time the ES was prepared to ensure they have identified appropriate adaptation measures. This should cover the estimated lifetime of the new infrastructure. Should a new set of UK Climate Projections become available after the preparation of the ES, the decision-maker should consider whether it needs to request further information from the applicant.
- 4.13.10** If any adaptation measures give rise to consequential impacts, the decision-maker should consider the impact of those in relation to the application as a whole and the impacts guidance set out elsewhere in this NPS (e.g. on flood risk, water resources and coastal change).
- 4.13.11** The decision-maker should satisfy itself that there are not critical features of the design of new ports infrastructure which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK Climate Projections, taking account of the latest credible scientific evidence on, for example, sea level rise (e.g. by referring to additional maximum credible scenarios from the Intergovernmental Panel on Climate Change or EA) and that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime.
- 4.13.12** Any adaptation measures should be based on the latest set of UK Climate Projections, the Government's latest national Climate Change Risk Assessment and in consultation with the EA.
- 4.13.13** Adaptation measures can be required to be implemented at the time of construction where necessary and appropriate to do so.
- 4.13.14** Where adaptation measures are necessary to deal with the impact of climate change and that measure would have an adverse effect on other aspects of the application and/or surrounding environment (e.g. coastal processes), the decision-maker may consider requiring the applicant to ensure that the adaptation measure could be implemented should the need arise, rather than at the outset of the development (e.g. increasing height of an existing, or requiring a new, sea wall).
- 4.13.15** The generic impacts advice in this NPS provides additional information.
- 4.14** **Common law nuisance and statutory nuisance**
- 4.14.1** Section 158 of the Planning Act 2008 confers statutory authority for carrying out development consented to by, or doing anything else authorised by, a development consent order. Such authority is conferred only for the purpose of providing a defence in any civil or criminal proceedings for nuisance. This would include a defence for proceedings for nuisance under Part III of the Environmental Protection Act (EPA) 1990 (statutory nuisance), but only to the extent that the nuisance is the inevitable consequence of what has been authorised. The defence does not extinguish the local authority's duties

under Part III of the EPA 1990 to inspect its area and take reasonable steps to investigate complaints of statutory nuisance and to serve an abatement notice where satisfied of its existence, likely occurrence or recurrence. The defence is not intended to extend to proceedings where the matter is 'prejudicial to health' and not a nuisance.

- 4.14.2** It is very important that, at the application stage of an NSIP, possible sources of nuisance under section 79(1) of the 1990 Act and how they may be mitigated or limited are considered by the decision-maker so that appropriate requirements can be included in any subsequent order granting development consent.
- 4.14.3** The decision-maker should note that the defence of statutory authority is subject to any contrary provision made by the decision-maker in any particular case in a development consent order (section 158(3)). Therefore, subject to paragraph 4.14.1, the decision-maker can disapply the defence of statutory authority in whole or in part, in any particular case, but in doing so should have regard to whether any particular nuisance is an inevitable consequence of the development.

4.15 Hazardous substances

- 4.15.1** All establishments wishing to hold stocks of certain hazardous substances above a threshold quantity need hazardous substances consent. Applicants should consult the Health and Safety Executive (HSE) at pre-application stage²⁸ if the project is likely to need hazardous substances consent. Where hazardous substances consent is applied for, the decision-maker will consider whether to make an order directing that hazardous substances consent shall be deemed to be granted alongside making an order granting development consent. The decision-maker should consult HSE about this.
- 4.15.2** HSE will assess the risks based on the development consent application. Where HSE does not advise against the decision-maker granting the consent, it will also recommend whether the consent should be granted subject to any conditions.
- 4.15.3** HSE sets a consultation distance around every site with hazardous substances consent and notifies the relevant local planning authorities. The applicant should therefore consult the local planning authority at pre-application stage to identify whether its proposed site is within the consultation distance of any site with hazardous substances consent and, if so, should consult HSE for its advice on locating the particular development there.

4.16 Health

- 4.16.1** Ports have the potential to affect the health, well-being and quality of life of the population.
- 4.16.2** Port developments can have direct impacts on health, including increasing traffic, air pollution, dust, odour, polluting water, hazardous waste and pests.

²⁸ Further information is available at the HSE's website: <http://www.hse.gov.uk/landuseplanning/nsip-applications.htm>

- 4.16.3 New port developments may also affect the composition, size and proximity of the local population, and in doing so may have indirect health impacts – for example if they affect access to key public services, transport or the use of open space for recreation and physical activity.
- 4.16.4 These impacts may affect people simultaneously, so the applicant and the decision-maker should consider the cumulative impact on health.
- 4.16.5 The applicant should identify any adverse health impacts and identify measures to avoid, reduce or compensate for these impacts as appropriate.

4.17 Security considerations

- 4.17.1 Development proposed at ports should not prejudice the interests of national defence. In case of doubt, the Ministry of Defence should be consulted.
- 4.17.2 National security considerations apply across all national infrastructure sectors. The Department for Transport acts as the Sector Sponsor Department for the ports sector and in this capacity has lead responsibility for security matters in that sector and for directing the security approach to be taken. It works closely with government security services, including the Centre for the Protection of National Infrastructure (CPNI), to reduce the vulnerability of the most ‘critical’ infrastructure assets in the sector to terrorism and other national security threats.
- 4.17.3 Government policy is to ensure that, where possible, proportionate protective security measures are designed into new infrastructure projects at an early stage in the project development. Where applications for development consent for infrastructure covered by this NPS relate to potentially ‘critical’ infrastructure, there may be national security considerations.
- 4.17.4 DfT will be notified at pre-application stage about every likely future application for port NSIPs, so that any national security implications can be identified. Where national security implications have been identified, the applicant should consult with relevant security experts from CPNI and DfT, to ensure that physical, procedural and personnel security measures have been adequately considered in the design process and that adequate consideration has been given to the management of security risks. If CPNI and DfT, as appropriate, are satisfied that security issues have been adequately addressed in the project when the application is submitted to the decision-maker, they will provide confirmation of this to the decision-maker, and the decision-maker should not need to give any further consideration to the details of the security measures in its examination.
- 4.17.5 The applicant should only include sufficient information in the application as is necessary to enable the IPC to examine the development consent issues and make a properly informed decision on the application.
- 4.17.6 In exceptional cases, where examination of an application would involve public disclosure of information about defence or national security. which would not be in the national interest, the Secretary of State can intervene and examine a part or the whole of the application. In that case, the Secretary of State may appoint an examiner to consider evidence in closed

session, and the Secretary of State would be the decision-maker for the application.

5 Generic impacts

5.1 **Biodiversity and geological conservation**

5.1.1 Biodiversity is the variety of life in all its forms and encompasses all species of plants and animals and the complex ecosystems of which they are a part. Geological conservation relates to the sites that are designated for their geology and/or their geomorphological²⁹ importance.

5.1.2 The various legislative provisions at the international and national level that can be relevant to planning decisions affecting biodiversity and geological conservation issues are set out in a Government Circular.³⁰ A separate guide sets out good practice in England in relation to planning for biodiversity and geological conservation.³¹ Guidance for Wales is set out in Technical Advice Note 5,³² *Nature Conservation and Planning*. Sea ports are necessarily located on coasts and estuaries. These areas are often of fundamental importance to biodiversity, particularly to bird and fish life, acting as the prime nursery grounds for a range of commercial species and as critical migration pathways for other species.

5.1.3 Construction and operation of port infrastructure can have an adverse impact on biodiversity and/or geodiversity, including through:

- dredging to maintain declared depths and to deepen waters to accommodate large ships. This can have implications for sediment transport, which can in turn affect marine wildlife and can cause remobilisation of toxic substances and nutrients, increased suspended solids, reduced visibility and reduction in dissolved oxygen;
- cargo handling and storage, which may cause run-off, spills, or leakages to the marine environment, which could possibly include toxic or harmful material, including organic matter or oily compounds. Water pollution and bottom contamination resulting from these effluents may lead to deterioration of aquatic biota and fishery resources;
- discharge of ships' ballast water: risks include the possible introduction of non-native species;
- erosion of habitats resulting from vessel movements;
- noise, which can have impacts on fish and marine mammalian behaviour patterns; and
- light, which can alter or hinder the migration of fish through estuaries.

²⁹ A list of designated sites (including marine sites) is included in the Geological Conservation Review held by the Joint Nature Conservation Committee (JNCC), <http://www.jncc.gov.uk/earthheritage>

³⁰ Government Circular: *Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System* (ODPM 06/2005, Defra 01/2005) available via TSO website www.tso.co.uk/bookshop and at www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity. It should be noted that this document does not cover more recent legislative requirements, such as the Marine Strategy Framework Directive. Where this Circular has been superseded, reference should be made to the latest successor document.

³¹ *Planning for Biodiversity and Geological Conservation: A Guide to Good Practice* (March 2006).

³² <http://wales.gov.uk/topics/planning/policy/tans/tan5/?lang=en>

Applicant's assessment

- 5.1.4** Where the development is subject to EIA, the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity. The applicant should provide environmental information proportionate to the infrastructure where EIA is not required to help the decision-maker consider thoroughly the potential effects of a proposed project.
- 5.1.5** The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.

Guidance for the decision-maker

- 5.1.6** The Government's biodiversity strategy is set out in *Working with the Grain of Nature*³³ and in the new England Biodiversity Strategy.³⁴ Its aim is to ensure:
- a halting, and if possible a reversal, of decline in priority habitats and species, with wild species and habitats as part of healthy, functioning ecosystems; and
 - the general acceptance of biodiversity's essential role in enhancing the quality of life, with its conservation becoming a natural consideration in all relevant public, private and non-governmental decisions and policies.
- 5.1.7** This aim needs to be viewed in the context of the challenge of climate change: failure to address this challenge will result in significant impact on biodiversity. The policy set out in the following sections recognises the need to protect the most important biodiversity and geological conservation interests.
- 5.1.8** As a general principle, and subject to the specific policies below, development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives.³⁵ Where significant harm cannot be avoided, then appropriate compensation measures should be sought.
- 5.1.9** In taking decisions, the decision-maker should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment.

³³ Strategy for England; similar strategies apply in Wales.

³⁴ *Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services*.
www.defra.gov.uk/publications/2011/08/19/pb13583-biodiversity-strategy-2020

³⁵ As set out in section 4.9 above.

International Sites

5.1.10 The most important sites for biodiversity are those identified through international conventions and European Directives. The Habitats Regulations provide statutory protection for these sites,³⁶ but do not provide statutory protection for potential Special Protection Areas (pSPAs) before they have been agreed with the European Commission. For the purposes of considering development proposals affecting them, as a matter of policy, the Government wishes pSPAs to be considered in the same way as if they had already been designated. Listed Ramsar sites should, also as a matter of policy, receive the same protection.

Sites of Special Scientific Interest (SSSIs)

5.1.11 Many SSSIs are also designated as sites of international importance and will be protected accordingly. Those that are not, or those features of SSSIs not covered by an international designation, should be given a high degree of protection. All National Nature Reserves are notified as SSSIs.

5.1.12 Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect, after mitigation, on the site's notified special interest features is likely, an exception should only be made where the benefits (including need) of the development, at this site,³⁷ clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs. The decision-maker should use requirements and/or planning obligations to mitigate the harmful³⁸ aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.

Marine Conservation Zones

5.1.13 Marine Conservation Zones (MCZs), introduced under the Marine and Coastal Access Act 2009, are areas that have been designated for the purpose of conserving marine flora or fauna, marine habitats or types of marine habitat or features of geological or geomorphological interest. The protected feature or features and the conservation objectives for the MCZ are stated in the designation order for the MCZ, which provides statutory protection for these areas. Measures to restrict damaging activities will be implemented by the MMO and other relevant organisations. As a public authority, the decision-maker is bound by the duties in relation to MCZs imposed by sections 125 and 126 of the Marine and Coastal Access Act 2009.

³⁶ See the Government Circular available at www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity for further information on the requirements of the habitats Regulations.

³⁷ The words "the need for and benefits of the development, at this site" should be understood to mean the national need for the infrastructure and the benefits it will bring, as well as the justification why the project has to take place at the site proposed.

³⁸ The term "harm" should be understood to mean significant harm.

Regional and Local Sites

5.1.14 Sites of regional and local biodiversity and geological interest, which include Regionally Important Geological Sites, Local Nature Reserves and Local Sites, have a fundamental role to play in meeting overall national biodiversity targets; contributing to the quality of life and the well-being of the community; and in supporting research and education. The decision-maker should give due consideration to such regional or local designations. However, given the need for new infrastructure, these designations should not be used in themselves to refuse development consent.

Ancient woodland and veteran trees

5.1.15 Ancient woodland is a valuable biodiversity resource, both for its diversity of species and for its longevity as woodland. Once lost, it cannot be recreated. The decision-maker should not grant development consent for any development that would result in its loss or deterioration, unless the benefits (including need) of the development, in that location,³⁹ outweigh the loss of the woodland habitat. Aged or ‘veteran’ trees found outside ancient woodland are also particularly valuable for biodiversity, and their loss should be avoided.⁴⁰ Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons why.

Biodiversity within developments

5.1.16 Development proposals provide many opportunities for building in beneficial biodiversity or geological features as part of good design. When considering proposals, the decision-maker should maximise such opportunities in and around developments, using requirements or planning agreements where appropriate.

Protection of other habitats and species

5.1.17 Many individual wildlife species receive statutory protection under a range of legislative provisions.⁴¹

5.1.18 Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales⁴² and

³⁹ The words “the need for, and benefits of, the development, in that location” should be understood to mean the national need for the infrastructure and the benefits it will bring, as well as the justification why the project has to take place in the location proposed.

⁴⁰ This does not prevent the loss of such trees where the decision-maker is satisfied that their loss is unavoidable.

⁴¹ Certain plant and animal species, including all wild birds, are protected under the Wildlife and Countryside Act 1981. European plant and animal species are protected under the Conservation of Habitats and Species Regulations 2010. Some other animals are protected under their own legislation, for example Protection of Badgers Act 1992.

⁴² Lists of habitats and species of principal importance for the conservation of biological diversity in England published in response to Section 41 of the Natural Environment and Rural Communities Act 2006 are available from the Biodiversity Action Reporting System website at www.ukbap-reporting.org.uk/news/details.asp?X=45 . For Wales, the list of habitats and species of principal importance is at www.biodiversitywales.org.uk/wales_biodiversity_partnership_documents-134.aspx

thereby requiring conservation action. The decision-maker should ensure that these species and habitats are protected from the adverse effects of development, where appropriate, by using requirements or planning agreements. The decision-maker should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits (including need) of the development clearly outweigh that harm.

Mitigation

- 5.1.19** The applicant should include appropriate mitigation measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:
- during construction, it will seek to ensure that activities will be confined to the minimum areas required for the works;
 - during construction and operation, best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements;
 - habitats will, where practicable, be restored after construction works have finished; and
 - opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals.
- 5.1.20** Where the applicant cannot demonstrate that appropriate mitigation measures will be put in place, the decision-maker should consider what appropriate requirements should be attached to any consent and/or planning obligations entered into.
- 5.1.21** The decision-maker will need to take account of what mitigation measures may have been agreed between the applicant and Natural England (or the Countryside Council for Wales) or the Marine Management Organisation (MMO), and whether Natural England (or the Countryside Council for Wales) or the MMO has granted or refused, or intends to grant or refuse, any relevant licences, including protected species mitigation licences.

Additional guidance on dredging

- 5.1.22 Capital dredging:** where capital dredging is required as part of the development, this will need to be subject to full environmental impact assessment, including likely effects on protected European sites or species. As a physical modification, it will need to be tested under the Water Framework Directive (2000/60/EC). The deposit of dredged material on land for recovery or disposal will be subject to the need for a permit or the registration of an exemption.
- 5.1.23 Maintenance dredging:** the Maintenance Dredging Protocol⁴³ guides operators and regulators on maintenance dredging activities that could

⁴³ <http://archive.defra.gov.uk/wildlife-pets/wildlife/protect/bird-habitat/mdpe.htm> . The maintenance dredging protocol is used to create a baseline documents for ports undertaking dredging/disposal operations on a regular basis on which the need for an AA can be made. Any assessment in the

potentially affect European sites around the coast of England. The Water Framework Directive is also relevant.

- 5.1.24** The Protocol provides for the environmental assessment of maintenance dredging as a programme, avoiding any need to re-assess separately every time an individual dredge is to be undertaken. This should highlight any requirement to dump or use arisings on land, rather than at sea. The applicant should indicate what effect (if any) the development will have on maintenance dredging requirements, and where necessary should ensure that a draft appropriate assessment under the habitats Directive forms part of the environmental statement for the development as a whole.
- 5.1.25** Re-use of clean dredged arisings may in some cases help to create new inter-tidal habitats as managed re-alignments. Marine licences (either deemed or directly granted by MMO) will be required for the placement of any dredged materials into the sea and other tidal waters anywhere below mean High Water Spring Tide. In Wales, the IPC will not be able to automatically deem marine licences. A licence may, therefore, be required from the Welsh Government.

5.2 Flood risk

- 5.2.1** Flooding is a natural process that plays an important role in shaping the natural environment. However, flooding threatens life and causes substantial damage to property. The effects of weather events on the natural environment, life and property can be increased in severity, both as a consequence of decisions about the location, design and nature of settlement and land use, and as a potential consequence of future climate change. Although flooding cannot be wholly prevented, its adverse impacts can be avoided or reduced through good planning and management.
- 5.2.2** Climate change over the next few decades is likely to mean milder, wetter winters and hotter, drier summers in the UK, while sea levels will continue to rise. Within the lifetime of nationally significant infrastructure projects, these factors will lead to increased flood risks in areas susceptible to flooding, and to an increased risk of flooding in some areas which are not currently thought of as being at risk. The applicant and the decision-maker should take account of the policy on climate change adaptation in section 4.13.
- 5.2.3** The aims of planning policy on development and flood risk are to ensure that flood risk from all sources of flooding is taken into account at all stages in the planning process, to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk. Where new development is, exceptionally, necessary in such areas, including 'water compatible' development, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall. Port development is water-compatible development and therefore acceptable in high flood risk areas.

ES should take account of the baseline document to see whether an increase to the amount of maintenance dredging required by the development will adversely affect the designated site.

Applicant's assessment

5.2.4 All applications for port development of 1 hectare or greater in Flood Zone 1 in England or Zone A in Wales,⁴⁴ and all proposals for projects located in Flood Zones 2 and 3 in England or Zones B or C in Wales, should be accompanied by a flood risk assessment (FRA). An FRA will also be required where a project less than 1 hectare may be subject to sources of flooding other than rivers and the sea (e.g. surface water), or where the Environment Agency, Internal Drainage Board or other body has indicated that there may be drainage problems. This should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.

5.2.5 The minimum requirements for FRAs are that they should:

- be proportionate to the risk and appropriate to the scale, nature and location of the project;
- consider the risk of flooding arising from the project, in addition to the risk of flooding to the project;
- take the impacts of climate change into account, clearly stating the development lifetime over which the assessment has been made;
- be undertaken by competent people, as early as possible in the process of preparing the proposal;
- consider both the potential adverse and beneficial effects of flood risk management infrastructure, including raised defences, flow channels, flood storage areas and other artificial features, together with the consequences of their failure;
- consider the vulnerability of those using the site, including arrangements for safe access;
- consider and quantify the different types of flooding (whether from natural or human sources and including joint and cumulative effects) and identify flood risk reduction measures, so that assessments are fit for the purpose of the decisions being made;
- consider the effects of a range of flooding events, including extreme events on people, property, the natural and historic environment and river and coastal processes;
- include the assessment of the remaining (known as 'residual') risk after risk reduction measures have been taken into account and demonstrate that this is acceptable for the particular project;
- consider how the ability of water to soak into the ground may change with development, along with how the proposed layout of the project may affect drainage systems;

⁴⁴ The Flood Zones refer to the probability of flooding from rivers, the sea and tidal sources and ignore the presence of existing defences, because these can be breached, overtopped and may not be in existence for the lifetime of the project. The definition of Flood Zones can be found in PPS25 (in England), TAN 15 (in Wales), or their relevant successor document(s).

- consider if there is a need to be safe and remain operational during a worst case flood event over the development's lifetime; and
 - be supported by appropriate data and information, including historical information on previous events.
- 5.2.6** Further guidance can be found in the Practice Guide which accompanies Planning Policy Statement 25 (PPS25) or successor documents. Guidance for Wales is set out in Technical Advice Note 15, *Development and Flood Risk*.⁴⁵
- 5.2.7** Applicants for projects which may be affected by, or may add to, flood risk should arrange pre-application discussions with the decision-maker and the Environment Agency, and, where relevant, other bodies such as Internal Drainage Boards, sewerage undertakers, navigation authorities, highways authorities and reservoir owners and operators. Such discussions should identify the likelihood and possible extent and nature of the flood risk, to help scope the FRA, and identify the information that will be required by the decision-maker to reach a decision on the application when it is submitted. The decision-maker should advise intending applicants to undertake these steps where they appear necessary but have not yet been addressed.
- 5.2.8** If the Environment Agency has concerns about the proposal on flood risk grounds, the applicant should discuss these concerns with the Environment Agency and take all reasonable steps to agree ways in which the proposal might be amended, or additional information provided, which would satisfy the Environment Agency's concerns.

Guidance for the decision-maker

- 5.2.9** In determining an application for development consent, the decision-maker should be satisfied that, where relevant:
- the application is supported by an appropriate FRA;
 - the Sequential Test has been applied as part of site-selection, as appropriate;
 - the proposal is in line with any relevant national and local flood risk management strategy;⁴⁶
 - a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
 - priority has been given to the use of sustainable drainage systems (SuDS) and the requirements set out in the next paragraph on National Standards have been met; and
 - in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.

⁴⁵ <http://wales.gov.uk/topics/planning/policy/tans/tan15?lang=en>

⁴⁶ As provided for in section 9(1) of the Flood and Water Management Act 2010.

- 5.2.10** For construction work which has drainage implications,⁴⁷ approval for the project's drainage system will form part of the development consent issued by the decision-maker. The decision-maker will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010.⁴⁸ In addition, the development consent order, or any associated planning obligations, will need to make provision for the adoption and maintenance of any SuDS, including any necessary access rights to property. The decision-maker should be satisfied that the most appropriate body is being given the responsibility for maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site. The responsible body could include, for example, the applicant, the landowner, the relevant local authority, or another body, such as the Internal Drainage Board.
- 5.2.11** If the Environment Agency continues to have concerns and objects to the grant of development consent on the grounds of flood risk, the decision-maker can grant consent, but would need to be satisfied before deciding whether or not to do so that all reasonable steps have been taken by the applicant and the Environment Agency to try to resolve the concerns.
- 5.2.12** The decision-maker should not consent development in Flood Zone 2 (in England or Zone B in Wales), unless it is satisfied that the Sequential Test requirements have been met. It should not consent development in Flood Zone 3 (or Zone C) unless it is satisfied that the Sequential and Exception Test requirements have been met (see below). However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site.

The Sequential Test

- 5.2.13** Preference should be given to locating projects in Flood Zone 1 (in England or Zone A in Wales). If there is no reasonably available site⁴⁹ in Flood Zone 1, then projects can be located in Flood Zone 2 (or Zone B). If there is no reasonably available site in Flood Zones 1 or 2 (or Zones A or B), then essential infrastructure (including nationally significant infrastructure) projects can be located in Flood Zone 3 (or Zone C) subject to the Exception Test.

⁴⁷ As defined in paragraph 7(2) of Schedule 3 to the Flood and Water Management Act 2010.

⁴⁸ The National Standards set out requirements for the design, construction, operation and maintenance of SuDS and may include guidance to which the IPC should have regard.

⁴⁹ Guidance on interpreting the term "reasonably available site" in this test can be found in the Practice Guide which accompanies PPS25 or its successor document. The applicant should justify with evidence to the IPC what area of search has been used in examining whether there are reasonably available sites. This will allow the IPC to consider whether the Sequential Test has been met as part of site selection.

The Exception Test

- 5.2.14** If, following application of the Sequential Test, it is not possible, consistent with wider sustainability objectives, for the project to be located in zones of lower probability of flooding than Flood Zone 3 (or Zone C), the Exception Test can be applied. The test provides a method of managing flood risk while still allowing necessary development to occur.
- 5.2.15** The Exception Test is only appropriate for use where the Sequential Test alone cannot deliver an acceptable site, taking into account the need for essential infrastructure to remain operational during floods. It may also be appropriate to use it where, as a result of the alternative site(s) at lower risk of flooding being subject to national designations such as landscape, heritage and nature conservation designations, e.g. Areas of Outstanding Natural Beauty (AONBs), Sites of Special Scientific Interest (SSSIs) and World Heritage Sites (WHS), it would not be appropriate to require the development to be located on the alternative site(s).
- 5.2.16** All the three elements of the Exception Test will have to be passed for development to be consented. For the Exception Test to be passed:
- it must be demonstrated that the project provides wider sustainability benefits to the community⁵⁰ that outweigh flood risk;
 - the project should be on developable previously-developed land⁵¹ or, if it is not on previously-developed land, that there are no reasonable alternative sites on developable previously-developed land; and
 - an FRA must demonstrate that the project will be safe, without increasing flood risk elsewhere and, where possible, will reduce flood risk overall.

Risks within ports

- 5.2.17** In broad terms it will be in port operatives' promoters' own interests that full account of climate change impacts and the increased probability of extreme weather events is taken in applications, in order to ensure, so far as reasonably possible, that no commercial loss will be experienced through inadequacy of infrastructure.
- 5.2.18** The Government's view is that there is no 'public good' need, on national resilience grounds, to require a higher specification than will secure commercial resilience of the individual facility, notwithstanding that some types of severe weather may affect all ports in a region or along a particular stretch of coastline, for example from a storm surge. This NPS provides

⁵⁰ These would include the benefits of, including the need for, the infrastructure set out in part 1.

⁵¹ Previously-developed land is that which is or was occupied by a permanent structure, including the curtilage of the developed land and any associated fixed surface infrastructure. This definition includes defence buildings, but excludes (a) land that is or has been occupied by agricultural or forestry buildings, (b) land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures, (c) land in built up areas such as parks, recreation grounds and allotments, which, although it may feature paths, pavilions and other buildings, has not been previously developed, and (d) land that was previously developed but where the remains of the permanent surface structure or fixed surface structure have blended into the landscape in the process of time (to the extent that it can reasonably be considered as part of the natural surroundings).

more generally for resilience and diversity of ports provision. Applicants will be in the best position to make a commercial judgement on the required appropriate adaptation measures to reduce the risk from long-term climate change as it affects their own facilities.

Flood risk outside the port area

5.2.19 The decision-maker should ensure that the applicant has considered the impact of the port development on the risk of flooding outside the port area and has taken reasonable measures to reduce this as far as possible. Exceptionally, where an increase in flood risk elsewhere cannot be avoided or wholly mitigated, the decision-maker may grant consent if it is satisfied that the increase in flood risk can be mitigated to an acceptable level, taking account of the benefits of port infrastructure as set out in section 1 above. Applications should also assess the impact on coastal processes – see 5.3 below.

Associated development

5.2.20 Associated development may include facilities that do not have to be located on or close to the port estate. Wherever technically feasible and economically reasonable, land-based facilities should be directed to sites at low probability of flooding from all sources. In addition to the above requirements, a Sequential Test should be applied to demonstrate that there are no reasonably available sites which would be appropriate to the type of development or land-use proposed, in areas with a significantly lower probability of flooding.

Mitigation

5.2.21 To satisfactorily manage flood risk, arrangements are required to manage surface water and the impact of the natural water cycle on people and property.

5.2.22 In this document the term Sustainable Drainage Systems (SuDS) refers to the whole range of sustainable approaches to surface water drainage management, including, where appropriate:

- source control measures, including rainwater recycling and drainage;
- infiltration devices to allow water to soak into the ground, which can include individual soakaways and communal facilities;
- filter strips and swales, which are vegetated features that hold and drain water downhill, mimicking natural drainage patterns;
- filter drains and porous pavements to allow rainwater and run-off to infiltrate permeable material below ground and provide storage if needed;
- basins and ponds to hold excess water after rain and allow controlled discharge that avoids flooding; and
- flood routes to carry and direct excess water through developments to minimise the impact of severe rainfall flooding.

- 5.2.23** Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.
- 5.2.24** The surface water drainage arrangements for any project should be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.
- 5.2.25** It may be necessary to provide surface water storage and infiltration to limit and reduce both the peak rate of discharge from the site and the total volume discharged from the site. There may be circumstances where it is appropriate for infiltration attenuation storage to be provided outside the project site, if necessary through the use of a planning obligation.
- 5.2.26** The Sequential Test should be applied to the layout and design of the project. More vulnerable uses should be located on parts of the site at lower probability and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes, such as amenity, wildlife habitat and flood storage uses. Opportunities should be taken to lower flood risk by reducing the built footprint of previously-developed sites and using SuDS.
- 5.2.27** Essential infrastructure which has to be located in flood risk areas should be designed to remain operational when floods occur.
- 5.2.28** The receipt of and response to warnings of floods is an essential element in the management of the residual risk of flooding. Flood warning and evacuation plans should be in place for those areas at an identified risk of flooding. Applicants should take advice from the emergency services when producing an evacuation plan for the project as part of the FRA. Any emergency planning documents, flood warning and evacuation procedures that are required should be identified in the FRA.

5.3 Coastal change

- 5.3.1** For the purpose of this section, coastal change means physical change to the shoreline, i.e. erosion, coastal landslip, permanent inundation and coastal accretion. Where onshore infrastructure projects are proposed on the coast, coastal change is a key consideration. Some kinds of coastal change happen very gradually; others over shorter timescales. Some are the result of purely natural processes; others, including potentially significant modifications of the coastline or coastal environment resulting from climate change, are wholly or partly man-made. This section is concerned both with the impacts which port infrastructure can have as a driver of coastal change and with how to ensure that developments are resilient to ongoing and potential future coastal change.
- 5.3.2** The construction of a port development may involve, for example, dredging, dredge spoil deposition, marine landing facility construction and flood and coastal protection measures, which could result in direct effects on the coastline, seabed, heritage assets and marine ecology and biodiversity.
- 5.3.3** Additionally, indirect changes to the coastline and sea bed might arise as a result of a hydrodynamic response to some of these direct changes. This could lead to localised or more widespread coastal erosion or accretion and

changes to offshore features such as submerged banks and ridges and marine biodiversity.

Applicant's assessment

- 5.3.4** Where relevant, applicants should undertake coastal geomorphological and sediment transfer modelling to predict and understand impacts and help identify relevant mitigating or compensatory measures.
- 5.3.5** The ES (see section 4.7) should include an assessment of the effects on the coast. In particular, applicants should assess:
- the impact of the proposed project on coastal processes and geomorphology, including by taking account of potential impacts from climate change. If the development will have an impact on coastal processes, the applicant must demonstrate how the impacts will be managed to minimise adverse impacts on other parts of the coast;
 - the implications of the proposed project on strategies for managing the coast, as set out in Shoreline Management Plans, any relevant marine plans, River Basin Management Plans and capital programmes for maintaining flood and coastal defences;
 - the effects of the proposed project on marine ecology, biodiversity and protected sites;
 - the effects of the proposed project on maintaining coastal recreation sites and features; and
 - the vulnerability of the proposed development to coastal change, taking account of climate change, during the project's operational life and any decommissioning period.
- 5.3.6** For any projects involving dredging or disposal into the sea, the applicant should consult the Marine Management Organisation (MMO) or the Welsh Government at an early stage.
- 5.3.7** The applicant should be particularly careful to identify any effects on the integrity and special features of Marine Conservation Zones, Special Areas of Conservation (SACs) and candidate SACs, Special Protection Areas (SPAs) and potential SPAs, Ramsar sites, actual and potential Sites of Community Importance and Sites of Special Scientific Interest.

Guidance for the decision-maker

- 5.3.8** The decision-maker should be satisfied that the proposed development will be resilient to coastal change, taking account of climate change, during the project's operational life and any de-commissioning period.
- 5.3.9** The decision-maker should not normally consent new development in areas of dynamic shorelines where the proposal could inhibit sediment flow or have an impact on coastal processes at other locations. Impacts on coastal processes must be managed to minimise adverse impacts on other parts of the coast. Where such proposals are brought forward, consent should only be granted where the decision-maker is satisfied that the benefits (including need) of the development outweigh the adverse impacts.

- 5.3.10** The decision-maker should ensure that applicants have restoration plans for areas of foreshore disturbed by direct works and will undertake pre- and post-construction coastal monitoring arrangements with defined triggers for intervention and restoration.
- 5.3.11** The decision-maker should examine the broader context of coastal protection around the proposed site, and the influence in both directions, i.e. coast on site, and site on coast.
- 5.3.12** The decision-maker should consult MMO or the Welsh Government on projects which could impact on coastal change, particularly those requiring a marine licence, since the MMO or the Welsh Government may also be involved in considering other projects which may have coastal impacts.
- 5.3.13** In addition to this NPS, the decision-maker must have regard to the Marine Policy Statement, as provided for in the Marine and Coastal Assess Act 2009. The decision-maker may also have regard to any relevant Shoreline Management Plans and Coastal Change Management Areas.
- 5.3.14** Substantial weight should be attached to the risks of flooding and coastal erosion. The applicant must demonstrate that full account has been taken of the policy on assessment and mitigation in section 5.2 above of this NPS on flood risk, taking account of the potential effects of climate change on these risks as discussed above.

Mitigation

- 5.3.15** Applicants should propose appropriate mitigation measures to address adverse physical changes to the coast, in consultation with the MMO, the Welsh Government or the Environment Agency, Local Planning Authorities, other statutory consultees, Coastal Partnerships and other coastal groups, as it considers appropriate. Where this is not the case, the decision-maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.

5.4 Traffic and transport impacts

- 5.4.1** Goods enter and leave the port by various combinations of road, rail and water transport (and in some cases by pipeline). The balance of modes used can have a variety of impacts on the surrounding road, rail and water infrastructure and consequently on the existing users of this infrastructure. Passengers and employees of ports and port-related businesses use both public and private transport, mainly road, and their travel can also affect congestion on connecting networks.
- 5.4.2** The most significant of these impacts, in the case of unitised traffic, is likely to be on the surrounding road infrastructure. The impact from increased traffic would, unless mitigating measures are taken, be likely to be an increase in congestion. There are also environmental impacts of road transport as compared with rail and water transport in terms of noise and emissions.
- 5.4.3** Delays at ports can occur for a number of reasons, including adverse weather conditions and industrial relations issues. Such delays can often result in a significant backlog of goods waiting to depart by ship. This kind of

event can have an adverse impact on connecting road infrastructure if the port estate is not able to provide sufficient capacity for the parking of heavy goods vehicles (HGVs).

Applicant's assessment

- 5.4.4** If a project is likely to have significant transport implications, the applicant's ES (see section 4.7) should include a transport assessment, using the WebTAG methodology stipulated in Department for Transport guidance,⁵² WeITAG for developments in Wales, or any successor to such methodology. Applicants should consult the Highways Agency and/or the relevant highway authority, as appropriate, on the assessment and mitigation. The assessment should distinguish between the construction, operation and decommissioning project stages as appropriate.
- 5.4.5** Where appropriate, the applicant should prepare a travel plan, including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts.
- 5.4.6** If additional transport infrastructure is proposed, applicants should discuss with network providers the possibility of co-funding by Government for any third-party benefits. Guidance has been issued⁵³ in England⁵⁴ which explains the circumstances where this may be possible, although the Government cannot guarantee in advance that funding will be available for any given uncommitted scheme at any specified time. For developments in Wales, the matter should be discussed with the Welsh Government.
- 5.4.7** In the case of container terminal development, account should be taken of the projected proportion of transshipment of containers and its variation over time as, for example, the proportion of direct-call may grow with overall demand.
- 5.4.8** Transport assessment should include private traffic accessing and leaving the port, where significant, even where not generated by the development under application.

Guidance for the decision-maker

- 5.4.9** A new nationally significant infrastructure project may give rise to substantial impacts on the surrounding transport infrastructure, and the IPC should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the IPC should consider conditions to mitigate adverse impacts on transport networks arising from the development, as set out below. Applicants may also be willing to enter

⁵² Guidance on transport assessments is at <http://dft.gov.uk/prg/regional/transportassessments/guidanceonta>

⁵³ <http://www.dft.gov.uk/pgr/regional/fundingtransportinfrastructure/>

⁵⁴ Please note that no separate guidance has been issued for Wales. The Welsh Government discusses funding arrangements with developers on a project-specific basis.

into planning obligations for funding infrastructure and otherwise mitigating adverse impacts.

- 5.4.10** Provided that the applicant is willing to enter into planning or transport obligations, or conditions can be imposed to mitigate transport impacts identified in the WebTAG/WeITAG transport assessment, with attribution of costs calculated in accordance with the Department for Transport's guidance, then development consent should not be withheld and appropriately limited weight should be applied to residual effects on the surrounding transport infrastructure.

Mitigation: demand management

- 5.4.11** Where mitigation is needed, possible demand management measures must be considered and, if feasible and operationally reasonable, required before considering conditions for the provision of new inland transport infrastructure to deal with remaining transport impacts is determined.
- 5.4.12** Demand management measures may in particular include lorry-booking arrangements aimed at spreading peak traffic within the working day. When the reasonableness of such measures is being determined, inflexibility of timing for arrival or departure at the other end of the journey (for example, at a distribution depot), should not be accorded great weight. This is because it is the Government's policy to encourage flexibility at both ends of the journey wherever possible.
- 5.4.13** The decision-maker should have regard to the cost-effectiveness of demand management measures compared with new transport infrastructure, as well as the aim to secure more sustainable patterns of transport development when considering mitigation measures.

Mitigation: modal share

- 5.4.14** The modal share of traffic entering and leaving the port needs to be considered objectively in the context of external congestion and environmental costs. Broadly speaking, rail and coastal or inland shipping should be encouraged over road transport, where cost-effective, but requirements or obligations, if they are necessary in order to avoid significant detriment to network users, should be evidence-based and present efficient incentives.
- 5.4.15** Because of the scale economies of consolidated loads, rail share is likely to be viable for unitised traffic in above-threshold container terminals, and there may be a possibility of encouraging some ro-ro traffic onto rail connections. For some forms of bulk traffic, rail may be the commercially predominant inland mode. Coastal shipping and inland waterways may be viable for certain flows.
- 5.4.16** For containers, the gauge clearance of the rail route to the most likely destinations for traffic should be considered, specifically whether clearance to W10 gauge at least is available or should be provided for to enable 9'6" 'hi-cube' containers to be transported on conventional wagons.

- 5.4.17** The use of inland waterways for the movement of goods to and from the port should be considered. Similarly, the prospect of promoting coastal shipping as an alternative to road and rail transport should be considered.
- 5.4.18** Obligations or requirements should be structured flexibly so as to keep to a reasonable minimum the risk that either applicants or network providers would be required to incur costs providing infrastructure that turned out to be under-used. Such measures might include various mechanisms, such as traffic-level triggers, shadow-tolling and/or escrow arrangements to guarantee funding.
- 5.4.19** Target modal shares for rail or coastal shipping may sometimes be appropriate, but are not mandatory, and the main emphasis should be on incentive mechanisms rather than rigid target-setting. Such shares should not be regarded as ends in themselves, but as indicators of the outcome of cost-effective transport obligations. Where such targets are to be set, there should always be an agreed understanding of the broad mechanisms by which they can be achieved, and 'early warning' decision points so that corrective measures may be taken if appropriate.
- 5.4.20** Rail obligations should not be sought to such an extent that the estimated net social cost of delivering them (net of the benefits of road vehicle mileage avoided) exceeds the corresponding net social cost of accommodating the marginal traffic on the roads. In assessing whether this is so, regard should be had to WebTAG (and WeITAG in Wales) or other methodological guidance issued by DfT.
- 5.4.21** Rail (or coastal-shipping) shares should not simply be read across from a previous development to the one under consideration, as the most efficient transport outcome may differ significantly according to all the circumstances of the case.

Mitigation: HGVs

- 5.4.22** Where a development, including any container or ro-ro development, is likely to generate or attract substantial HGV traffic, the decision-maker may attach requirements to a consent that:
- control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements;
 - make sufficient provision for HGV parking, either on the port estate or at dedicated facilities elsewhere, to avoid 'overspill' parking on public roads during normal operating conditions. Developments should be designed with sufficient road capacity and parking provision (whether on- or off-site) to avoid the need for prolonged queuing on approach roads, and particularly for uncontrolled on-street HGV parking on nearby public roads in normal traffic operating conditions, and allowing reasonable estimates for peak traffic patterns and fluctuations during normal operations;
 - ensure satisfactory arrangements, taking account of the views of road network providers and of the responsible police force(s), for dealing with reasonably foreseeable abnormal disruption. Where such effects are

likely to cause queuing on the strategic road network or significant queuing on local roads, the applicant should include the outcome of consultation with the relevant police force(s) as to traffic management measures that will be brought into effect, what the procedures will be for triggering them, and attribution of costs.

- 5.4.23** Ports can provide valuable facilities for the checking of heavy goods vehicles. Port development that includes ro-ro facilities should be planned in such a way that facilities can be provided for enforcement agencies to operate checks as and when appropriate.

Mitigation: access

- 5.4.24** Where development would worsen accessibility, such impacts should be mitigated so far as reasonably possible.
- 5.4.25** Employee travel assessment should be undertaken for all major port development.

Funding of infrastructure

- 5.4.26** Separate guidance has been issued⁵⁵ on developer contributions in England.⁵⁶ The essential principle is that the developer is expected to fund provision of infrastructure required solely to accommodate users of the development without detriment to pre-existing users. Where, in the case of a nationally significant infrastructure project (NSIP) such as a major port development, there is a case for bringing forward schemes which help meet the 'background' growth in 'third-party' traffic, the guidance explains the circumstances in which the Government would expect to 'co-fund' in respect of such benefits and the methodology that should be employed to determine funding shares.
- 5.4.27** The Government cannot guarantee in advance that funding will be available for any given uncommitted scheme at any specified time.
- 5.4.28** Applicants should engage, from the earliest stages of project development, with network providers, to assess whether in the case of a specific major port development co-funding by Government may be appropriate, in recognition of third-party benefits.
- 5.4.29** Parties should endeavour to agree in advance, in as much detail as possible, the scope of works, the precise basis on which costs and risks will be attributed, and arrangements for dispute resolution. If the decision-maker is not satisfied that draft s.106 (Town and Country Planning Act), s.278 (Highways Act) or other forms of agreement are sufficiently precise, it may invite the parties to engage in further negotiations to arrive at a more detailed agreement before the granting of consent will be countenanced.
- 5.4.30** A timetable should be set for such negotiations. With proper frontloading of the application process, it should be possible to get all parties aligned in time to complete any necessary agreements before the decision is made. If

⁵⁵ <http://www.dft.gov.uk/pgr/regional/fundingtransportinfrastructure/>

⁵⁶ No separate guidance has been issued for Wales, where the Welsh Government would discuss funding arrangements with developers on a project-specific basis.

there is failure to reach agreement within that time, appropriate requirements may be imposed.

- 5.4.31** If the applicant suggests that the costs of meeting any obligations and/or requirements would make the proposal economically unviable, this should not in itself justify the relaxation by the decision-maker of any obligations or requirements needed to secure the mitigation.

5.5 Waste management

- 5.5.1** Government policy on hazardous and non-hazardous waste is intended to protect human health and the environment by producing less waste and by using it as a resource wherever possible. Where this is not possible, waste management regulation ensures that waste is disposed of in a way that is least damaging to the environment and to human health.

- 5.5.2** Sustainable waste management is implemented through the 'waste hierarchy':

- prevention;
- preparing for re-use;
- recycling;
- other recovery, including energy recovery; and
- disposal.

Disposal of waste should only be considered where other waste management options are not available or where it is the best overall environmental outcome.

- 5.5.3** All large infrastructure projects are likely to generate hazardous and non-hazardous waste during the construction, operation and decommissioning phases. The Environment Agency's (EA) Environmental Permitting (EP) regime incorporates operational waste management requirements for certain activities. When an applicant applies to the EA for an Environmental Permit, the EA will require the application to demonstrate that processes are in place to meet all relevant EP requirements.

Applicant's assessment

- 5.5.4** The applicant should set out the arrangements that are proposed for managing any waste produced and prepare a Site Waste Management Plan. The arrangements described and the Management Plan should include information on the proposed waste recovery and disposal system for all waste generated by the development and an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation. The applicant should seek to minimise the volume of waste produced and the volume of waste sent for disposal, unless it can be demonstrated that this is the best overall environmental outcome.

Guidance for the decision-maker

- 5.5.5** The decision-maker should consider the extent to which the applicant has proposed an effective system for managing hazardous and non-hazardous waste arising from the construction, operation and decommissioning of the proposed development. It should be satisfied that:
- any such waste will be properly managed, both on-site and off-site;
 - the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area; and
 - adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent to disposal, except where that is the best overall environmental outcome.
- 5.5.6** Where necessary, the decision-maker should use requirements or obligations to ensure that appropriate measures for waste management are applied. When giving consent, the decision-maker may wish to include a condition on revision of waste management plans at reasonable intervals.
- 5.5.7** Where the project will be subject to the Environment Agency's Environmental Permitting regime, waste management arrangements during operations will be covered by the permit and the considerations set out in section 5 will apply.

5.6 Water quality and resources

- 5.6.1** Infrastructure development can have adverse effects on the water environment, including groundwater, inland surface water, transitional waters⁵⁷ and coastal waters. During the construction, operation and decommissioning phases, it can lead to increased demand for water, involve discharges to water and cause adverse ecological effects resulting from physical modifications to the water environment.
- 5.6.2** There may also be an increased risk of spills and leaks of pollutants to the water environment. These effects could lead to adverse impacts on health or on protected species and habitats (see section on biodiversity at 5.1) and could, in particular, result in surface waters, groundwaters or protected areas⁵⁸ failing to meet environmental objectives established under the Water Framework Directive.

Applicant's assessment

- 5.6.3** Where the project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and

⁵⁷ As defined in the Water Framework Directive (2000/60/EC), transitional waters are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

⁵⁸ Protected areas are areas which have been designated as requiring special protection under specific Community legislation for the protection of their surface water and groundwater or for the conservation of habitats and species directly depending on water.

impacts of, the proposed project on water quality, water resources and physical characteristics of the water environment as part of the Environmental Statement (ES) or equivalent.

5.6.4 The ES should describe:

- the existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges;
- existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Catchment Abstraction Management Strategies);
- existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project and any impact of physical modifications to these characteristics;
- any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive and source protection zones around potable groundwater abstractions; and
- any cumulative effects.

Guidance for the decision-maker

5.6.5 Activities that discharge to the water environment are subject to pollution control. The considerations set out in section 5 on the interface between planning and pollution control therefore apply. These considerations will also apply in an analogous way to the abstraction licensing regime⁵⁹ regulating activities that take water from the water environment, and to the control regimes relating to works to, and structures in, on, or under a controlled water.

5.6.6 The decision-maker will generally need to give impacts on the water environment more weight where a project would have adverse effects on the achievement of the environmental objectives established under the Water Framework Directive.

5.6.7 The decision-maker should satisfy itself that a proposal has regard to the River Basin Management Plans and the requirements of the Water Framework Directive (including Article 4.7) and its daughter Directives, including those on priority substances and groundwater. The specific objectives for particular river basins are set out in River Basin Management Plans. The decision-maker should also consider the interactions of the proposed project with other plans such as Marine Plans, Water Resources Management Plans and Shoreline/Estuary Management Plans.

5.6.8 The decision-maker should consider whether appropriate requirements should be attached to any development consent and/or planning agreements entered into to mitigate adverse effects on the water environment.

⁵⁹ Abstraction licensing provisions are expected to change through removal of licensing exemptions.

Mitigation

- 5.6.9** The decision-maker should consider whether mitigation measures are needed for operational, construction and decommissioning phases over and above any which may form part of the project application. A construction management plan may help codify mitigation at that stage.
- 5.6.10** The risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution control practice. For example, designated areas for storage and unloading, with appropriate drainage facilities, should be clearly marked.
- 5.6.11** The impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling.
- 5.6.12** For mitigation measures on impacts affecting biodiversity, see section 5.1.

5.7 Air quality and emissions

- 5.7.1** Ports can contribute to local air pollution problems, since they bring together several sources of pollutants:
- large volumes of HGV traffic emit pollutants such as nitrogen oxides and particulates, with emissions exacerbated by congestion and stop-start driving conditions;
 - emissions (especially sulphur dioxide) from ships entering the port and using coastal routes, estuaries and inland waterways can also be significant; and
 - certain cargoes such as cements and aggregates can cause local dust pollution.
- 5.7.2** Infrastructure development can have adverse effects on air quality. The construction, operation and decommissioning phases can involve emissions to air, which could lead to adverse impacts on human health, on protected species and habitats, or on the wider countryside. Impacts on protected species and habitats are covered in section 5.1 on biodiversity and geological conservation.
- 5.7.3** Emissions of sulphur dioxide (SO₂) from shipping are being tackled through the strengthening of emissions standards and the development of SO₂ Emissions Control Areas (SECAs). Emissions from road transport have been falling as a result of technical improvements in engine and catalyst design.

Applicant's assessment

- 5.7.4** Where the project is likely to have adverse effects on air quality, the applicant should undertake an assessment of the impacts of the proposed project as part of the Environmental Statement (ES).
- 5.7.5** The ES should describe:
- any significant air emissions, their mitigation and any residual effects, distinguishing between the construction and operation stages and taking

account of any significant emissions from any road traffic generated by the project;

- the predicted absolute emission levels from the proposed project, after mitigation methods have been applied; and
- existing air quality levels and the relative change in air quality from existing levels.

Guidance for the decision-maker

- 5.7.6** The decision-maker should generally give air quality considerations substantial weight where a project would lead to deterioration in air quality in an area, or leads to a new area, where the air quality breaches any national air quality limits. However, air quality considerations will also be important where substantial changes in air quality are expected, even if this does not lead to any breaches of any national air quality limits.
- 5.7.7** In all cases the decision-maker must take account of relevant statutory air quality limits. Where a project is likely to lead to a breach of such limits, the developers should work with the relevant authorities to secure appropriate mitigation measures to allow the proposal to proceed. In the event that a project will lead to non-compliance with a statutory limit, the decision-maker should refuse consent.

Mitigation

- 5.7.8** The decision-maker should consider whether mitigation measures are needed both for operational and construction emissions over and above any that may form part of the project application. A construction management plan may help codify mitigation at this stage.
- 5.7.9** In doing so, the decision-maker may refer to the conditions and advice in the Air Quality Strategy or any successor to it.
- 5.7.10** The mitigations identified in the section on transport impacts will help mitigate the effects of air emissions from transport.
- 5.7.11** Ports are able, to an extent, to influence the modal share of inland connections to port facilities, which may help to reduce local air pollution. For example, where peak concentrations of one or more pollutants have a high impact or risk exceedence of limits, vehicle booking systems may help to alleviate such effects, as well as minimising congestion. The decision-maker should consider the extent to which the applicant intends to influence the modal share of inland connections to/from the ports and the robustness of these proposals. See transport assessment at section 5.4 above.
- 5.7.12** Local air pollution may also be abated through the provision of shore-side fixed electrical power to replace ships' generators while in port, this being known as 'cold-ironing'. Problems of frequency compatibility and technical standards are as yet unresolved, and the technology remains most appropriate for large vessels expected to be in berth for prolonged periods. There is possibility that supra-national instruments will require the use of cold-ironing in the future.

- 5.7.13** All proposals should either include reasonable advance provisions (such as ducting and spaces for sub-stations) to allow the possibility of future provision of cold-ironing infrastructure, or give reasons as to why it would not be economically and environmentally worthwhile to make such provision.
- 5.7.14** The decision-maker should consider each case objectively to determine whether provision of cold-ironing infrastructure (rather than provisions to allow this in the future) should be included in the development. This consideration should be based on the dwell time of vessels and technical compatibility of the ships intended to call at the port, as well as on the emissions and other impacts. Where supra-national instruments requiring the use of cold-ironing appear to be imminent, the decision-maker should take this into account.
- 5.7.15** Where cold-ironing infrastructure is proposed, account needs to be taken of the prospective impact on the National Grid of meeting the power demands and therefore the costs to electricity supply providers of doing so without impacts on reliability for other users.

5.8 Dust, odour, artificial light, smoke, steam and insect infestation

- 5.8.1** During the construction, operation and decommissioning of port infrastructure there is potential for the release of a range of emissions such as odour, dust, steam, smoke, artificial light and infestation of insects. All have the potential to have a detrimental impact on amenity or cause a common law nuisance or statutory nuisance under Part III, Environmental Protection Act 1990 (see 4.14.1 above). Insect and vermin infestation may also have implications for public health. Note that pollution impacts from some of these emissions (e.g. dust, smoke) are covered in section 5.7 on air emissions.
- 5.8.2** Because of the potential effects of these emissions and infestation, and in view of the availability of the defence of statutory authority against nuisance claims, as described at 4.14.1 above, it is important that the potential for these impacts is considered by the decision-maker.
- 5.8.3** For nationally significant infrastructure projects of the type covered by this NPS, some impact on amenity for local communities is likely to be unavoidable. The aim should be to keep impacts to a minimum and at a level that is acceptable.

Applicant's assessment

- 5.8.4** The applicant should assess the potential for insect infestation and emissions of odour, dust, steam, smoke and artificial light to have a detrimental impact on amenity, as part of the Environmental Statement.
- 5.8.5** In particular, the assessment provided by the applicant should describe:
- the type, quantity and timing of emissions;
 - aspects of the development which may give rise to emissions;
 - premises or locations that may be affected by the emissions;
 - effects of the emission on identified premises or locations; and

- measures to be employed in preventing or mitigating the emissions.

5.8.6 The applicant is advised to consult the relevant local planning authority and, where appropriate, the Environment Agency (EA) about the scope and methodology of the assessment.

Guidance for the decision-maker

5.8.7 The decision-maker should satisfy itself that all reasonable steps have been taken, and will be taken, to minimise any detrimental impact on amenity from insect infestation and emissions of odour, dust, steam, smoke and artificial light.

5.8.8 If the decision-maker does grant development consent for a project, it should consider whether there is a justification for all of the authorised project (including any associated development) being covered by a defence of statutory authority against nuisance claims. If it cannot conclude that this is justified, it should disapply in whole or in part the defence through provision in the development consent or harbour order.

5.8.9 Where the decision-maker believes it appropriate, it may consider attaching requirements to the development consent, in order to secure certain mitigation measures.

5.8.10 In particular, the decision-maker should consider whether to require the applicant to abide by a scheme of management and mitigation concerning insect infestation and emissions of odour, dust, steam, smoke and artificial light from the development. The decision-maker should consider the need for such a scheme to reduce any loss to amenity which might arise during the construction, operation and decommissioning of the development. A construction management plan may help codify mitigation at that stage.

Mitigation

5.8.11 Mitigation measures may include one or more of the following:

- **engineering:** prevention of a specific emission at the point of generation; control, containment and abatement of emissions if generated;
- **lay-out:** adequate distance between source and sensitive receptors; reduced transport or handling of materials; and
- **administrative:** limiting operating times; restricting activities allowed on the site; implementing management plans.

5.9 Biomass/waste impacts – odour, insect and vermin infestation

5.9.1 Generic impacts of dust, odour, artificial light, smoke, steam and insect infestation are set out in section 5.8. Insect and vermin infestation may be a particular issue with regard to storage of fuels for energy from waste (EfW) generating stations, as they may be attracted to biodegradable waste stored and processed at the facility. Odour is also likely to arise during the reception, storage and handling/processing of incoming biodegradable waste.

Applicant's assessment

5.9.2 The applicant should assess the potential for insect infestation and emissions of odour as set out in section 5.8, with particular regard to the handling and storage of waste for fuel.

IPC decision making

5.9.3 The IPC should satisfy itself that the proposal sets out appropriate measure to minimise impacts on local amenity from odour, insect and vermin infestation.

Mitigation

5.9.4 In addition to the mitigation measures set out in section 5.8, reception, storage and handling of waste and residues should be carried out within defined areas, e.g. bunkers or silos, within enclosed building at EfW generating stations.

5.9.5 To minimise potential for infestation, the time between reception, processing and combustion of waste may be limited by consent requirements.

5.10 Noise and vibration

5.10.1 Excessive noise can have wide-ranging impacts on quality of human life and health (e.g. owing to annoyance or sleep disturbance), use and enjoyment of areas of value such as quiet places and areas with high landscape quality. The Government's policy on noise is set out in the Noise Policy Statement for England.⁶⁰ It promotes good health and good quality of life through effective noise management. Similar considerations apply to vibration, which can also cause damage to buildings. In this section, in line with current legislation, references to 'noise' below apply equally to assessment of impacts of vibration.

5.10.2 Noise resulting from a proposed development can also have adverse impacts on wildlife and biodiversity. Noise effects of the proposed development on ecological receptors should be assessed by the decision-maker in accordance with the Biodiversity and Geological Conservation section of this NPS.

5.10.3 Factors which will determine the likely noise impact include:

- the inherent operational noise from the proposed development, and its characteristics;
- the proximity of the proposed development to noise-sensitive premises (including residential properties, schools and hospitals) and noise-sensitive areas (including certain parks and open spaces);
- the proximity of the proposed development to quiet or tranquil places and other areas that are particularly valued for their acoustic environment or landscape quality; and

⁶⁰ As set out in the Noise Policy Statement for England
<http://www.defra.gov.uk/environment/quality/noise/policy/documents/noise-policy.pdf>

- the proximity of the proposed development to designated sites where noise may have an adverse impact on protected species or other wildlife.

Applicant's assessment

5.10.4 Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment:

- a description of the noise-generating aspects of the development proposal leading to noise impacts on the marine and terrestrial environment, including the identification of any distinctive tonal, impulsive or low-frequency characteristics of the noise;
- identification of noise-sensitive premises and areas and noise-sensitive species that may be affected;
- the characteristics of the existing marine and terrestrial noise environment;
- a prediction of how the noise environment will change with the proposed development:
 - in the shorter term during the construction period;
 - in the longer term during the operating life of the infrastructure; and
 - at particular times of the day, evening and night as appropriate.
- an assessment of the effect of predicted changes in the noise environment on any noise sensitive areas and noise sensitive species; and
- measures to be employed in mitigating the effects of noise.

The nature and extent of the noise assessment should be proportionate to the likely noise impact.

5.10.5 The noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements, or other forms of transportation, should be considered.

5.10.6 Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards.⁶¹ For the prediction, assessment and management of construction noise, reference should be made to any relevant British Standards which also give examples of mitigation strategies.

5.10.7 The applicant should consult the Environment Agency and Natural England, or the Countryside Council for Wales, and the MMO in relation to marine protected species in England, as necessary and in particular with regard to assessment of noise on protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment.

⁶¹ For example, for industrial noise, BS 4192: 1997 – Method for rating industrial noise affecting mixed residential and industrial areas, and BS 8233: 1999 – Sound insulation and noise reduction for buildings.

The seasonality of potentially affected species in nearby sites may also need to be taken into account.

Guidance for the decision-maker

- 5.10.8** The project should demonstrate good design through selection of:
- the quietest cost-effective plant available;
 - containment of noise within buildings wherever possible;
 - optimisation of plant layout to minimise noise emissions; and
 - where possible, the use of landscaping, bunds or noise barriers or other mechanisms to reduce noise transmission.
- 5.10.9** The decision-maker should be satisfied that the proposals will meet the following aims:
- avoid significant adverse impacts on the environment, human health and quality of life from noise;
 - mitigate and minimise other adverse impacts on health and quality of life from noise; and
 - where possible, contribute to improvements to health and quality of life through the effective management and control of noise.
- 5.10.10** When preparing the development consent order, the decision-maker should consider including measurable requirements or specifying the mitigation measures to be put in place to ensure that actual noise levels from the project do not exceed those described in the assessment or any other estimates on which the decision-maker's decision was based.

Mitigation

- 5.10.11** The decision-maker should consider whether mitigation measures are needed both for operational and construction noise over and above any which may form part of the project application. In doing so, the decision-maker may wish to impose requirements. Any such requirements should take account of the guidance set out in Circular 11/95, as revised, *The Use of Conditions in Planning Permissions*, or any successor to it.
- 5.10.12** Mitigation measures for the project should be proportionate and reasonable and may include one or more of the following:
- **engineering:** reduction of noise at point of generation and containment of noise generated;
 - **lay-out:** adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers or other buildings;
 - **administrative:** limiting operating times of source; restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites.
- 5.10.13** In certain situations, and only when all other forms of noise mitigation have been exhausted, it may be appropriate for the decision-maker to consider

requiring noise mitigation through improved sound insulation to dwellings, or in extreme cases, compulsory purchase of affected properties, as a means of consenting otherwise unacceptable development.

5.11 Landscape and visual impacts

- 5.11.1** The landscape and visual effects of proposed projects will vary on a case-by-case basis according to the type of development, its location and the landscape setting of the proposed development. In this context, references to landscape should be taken as covering seascape and townscape, where appropriate.
- 5.11.2** Port development can sometimes have a negative impact on the characteristics and visual amenity of the landscape. This can be a particular problem where the local area is dependent on an acknowledged tourist activity destination and/or important for recreation (see 4.6.1). The impact can be the result of the physical character of the port development as well as its introduction of light pollution and noise to areas that may otherwise have been tranquil.

Applicant's assessment

- 5.11.3** The applicant should carry out a landscape and visual assessment and report it in the ES. A number of guides have been produced to assist in addressing landscape issues.⁶² The landscape and visual assessment should include reference to any landscape character assessment and associated studies, as a means of assessing landscape impacts relevant to the proposed project. The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England and local development plans in Wales.
- 5.11.4** The applicant's assessment should include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character.
- 5.11.5** The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include any light pollution effects including on local amenity, rural tranquillity and nature conservation.

Guidance for the decision-maker: landscape impact

- 5.11.6** Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints, the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.

⁶² Landscape Institute and Institute of Environmental Management and Assessment (2002, 2nd edition): *Guidelines for Landscape and Visual Impact Assessment*; and Land Use Consultants (2002): *Landscape Character Assessment – Guidance for England and Scotland*.

Guidance for the decision-maker: development proposed within nationally designated areas

- 5.11.7** National Parks, the Broads and Areas of Outstanding Natural Beauty (AONB), have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the decision-maker has a statutory duty to have regard to in its decisions.⁶³ The conservation of the natural beauty of the landscape and countryside should be given substantial weight by the decision-maker in deciding on applications for development consent in these areas.
- 5.11.8** Nevertheless, the decision-maker may grant development consent in these areas in exceptional circumstances. The development should be demonstrated to be in the public interest, and consideration of such applications should include an assessment of:
- the need for the development, including in terms of any national considerations,⁶⁴ and the impact of consenting, or not consenting it, upon the local economy;
 - the cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way;⁶⁵ and
 - any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.
- 5.11.9** The decision-maker should ensure that any projects consented in these designated areas should be carried out to high environmental standards through the application of appropriate requirements where necessary.

Guidance for the decision-maker: developments outside nationally designated areas which might affect them

- 5.11.10** The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation, and such projects should be designed sensitively, given the various siting, operational and other relevant constraints. This should include projects in England which may have impacts on National Scenic Areas in Scotland.
- 5.11.11** The fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.

⁶³ For an explanation of the duties which will apply to the IPC, see *Duties on relevant authorities to have regard to the purposes of National Parks, AONBs and the Norfolk and Suffolk Broads* at <http://archive.defra.gov.uk/rural/documents/protected/npaonb-duties-guide.pdf>

⁶⁴ National considerations should be understood to include the national need for and benefits of the infrastructure set out in part 1, as well as the contribution of the infrastructure to the national economy.

⁶⁵ See section 4.9 for the general factors that should frame the decision-maker's consideration of alternative sites or routes.

Guidance for the decision-maker: developments in other areas

- 5.11.12** Outside nationally designated areas, there are local landscapes that may be highly valued locally and protected by local designation. Where a local development document in England or a local development plan in Wales has policies based on landscape character assessment, these should be paid particular attention. However, local landscape designations should not be used in themselves as reasons to refuse consent, as this may unduly restrict acceptable development.
- 5.11.13** The decision-maker should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation.

Guidance for the decision-maker: visual impact

- 5.11.14** The decision-maker will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the development. Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.
- 5.11.15** It may be helpful for applicants to draw attention, in the supporting evidence to their applications, to any examples of existing permitted infrastructure they are aware of with a similar magnitude of impact on sensitive receptors. This may assist the decision-maker in judging the weight it should give to the assessed visual impacts of the proposed development.

Mitigation

- 5.11.16** Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of development may result in a significant operational constraint and reduction in function. There may, however, be exceptional circumstances where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the decision-maker may decide that the benefits of the mitigation to reduce the landscape effects outweigh the marginal loss of function.
- 5.11.17** Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of proposed project. Materials and designs of buildings should always be given careful consideration.
- 5.11.18** Depending on the topography of the surrounding terrain and areas of population, it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant point.

5.12 Historic environment

5.12.1 The construction, operation and decommissioning of port infrastructure has the potential to result in adverse impacts on the historic environment.

5.12.2 The historic environment includes all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, landscaped and planted or managed flora. Those elements of the historic environment that hold value to this and future generations because of their historic, archaeological, architectural or artistic interest are called 'heritage assets'. A heritage asset may be any building, monument, site, place, area or landscape, or any combination of these. The sum of the heritage interests that a heritage asset holds is referred to as its significance.⁶⁶

5.12.3 Some heritage assets have a level of significance that justifies official designation. Categories of designated heritage assets are: World Heritage Sites; Scheduled Monuments; Listed Buildings; Protected Wreck Sites;⁶⁷ Protected Military Remains; Registered Parks and Gardens; Registered Battlefields (England only); Conservation Areas; and Registered Historic Landscapes (Wales only).⁶⁸

5.12.4 There are heritage assets with archaeological interest that are not currently designated as scheduled monuments, but which are demonstrably of equivalent significance. These include:

- those that have yet to be formally assessed for designation;
- those that have been assessed as capable of being designated but which the Secretary of State has decided not to designate;
- those that are incapable of being designated by virtue of being outside the scope of the Ancient Monuments and Archaeological Areas Act 1979.

The absence of designation for such heritage assets does not indicate lower significance. If the evidence before the decision-maker indicates to it that a non-designated heritage asset of the type described may be affected by the proposed development then the heritage asset should be considered subject to the same policy considerations as those that apply to designated heritage assets.

⁶⁶ Save for the term 'Designated Heritage Asset', these and other terms used in this section are defined in Annex 2 to PPS5, or any successor to it. The PPS5 Practice Guide contains guidance on their interpretation. Additionally, part of the purpose of designating National Parks is in order to protect their cultural heritage and the conservation of cultural heritage is an important consideration in all Areas of Outstanding Natural Beauty.

⁶⁷ The issuing of licences to undertake works on Protected Wreck Sites in English waters is the responsibility of the Secretary of State for Culture, Media and Sport and does not form part of development consents issued by the IPC. In Wales it is the responsibility of Welsh Ministers. The issuing of licences for Protected Military Remains is the responsibility of the Secretary of State for Defence.

⁶⁸ Additionally, part of the purpose of designating National Parks is to protect their cultural heritage and the conservation of cultural heritage is an important consideration in all Areas of Outstanding Natural Beauty.

5.12.5 The decision-maker should also consider the impacts on other non-designated heritage assets, as identified either through the development plan making process (local listing) or through the decision-making process on the basis of clear evidence that the assets have a significance that merits consideration in its decisions, even though those assets are of lesser value than designated heritage assets.

Applicant's assessment

5.12.6 As part of the ES, the applicant should provide a description of the significance⁶⁹ of the heritage assets affected by the proposed development and the contribution of their setting to that significance. The level of detail should be proportionate to the importance of the heritage assets and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset. As a minimum, the applicant should have consulted the relevant Historic Environment Record⁷⁰ and assessed the heritage assets themselves using expertise where necessary according to the proposed development's impact.

5.12.7 Where a development site includes, or the available evidence suggests it has potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation. Where proposed development will affect the setting of a heritage asset, representative visualisations may be necessary to explain the impact.

5.12.8 The possibility of damage to buried features from underwater disposal of dredged material should be taken into account.

5.12.9 The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents.

Guidance for the decision-maker

5.12.10 In considering applications, the decision-maker should seek to identify and assess the significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset, taking account of:

- evidence provided with the application;
- any designation records;
- Rapid Coastal Zone Assessments by English Heritage where relevant;

69 Its value to people now and in the future because of its heritage interest.

70 Historic Environment Records (HERs) are information services maintained by local authorities and National Park Authorities with a view to providing access to resources relating to the historic environment of an area for public benefit and use. Details of HERs in England are available from the Heritage Gateway website at <http://www.heritagegateway.org.uk/Gateway/CHR>. For Wales, details of HERs can be obtained through the Historic Wales Portal at <http://jura.rcahms.gov.uk/nms/start.jsp>. English Heritage and Cadw hold additional information about heritage assets in English or Welsh waters. This should also be consulted where relevant.

- the Historic Environment Record and similar sources of information;⁷¹
- the heritage assets themselves;
- the outcome of consultations with interested parties; and
- where appropriate and when the need arises to understand the significance of the heritage assets, expert advice.

5.12.11 In considering the impact of a proposed development on any heritage assets, the decision-maker should take into account the particular nature of the significance of the heritage assets and the value that they hold for this as well as future generations. This understanding should be used to avoid or minimise conflict between conservation of the significance and proposals for development.

5.12.12 The decision-maker should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution they can make to sustainable communities and economic vitality.⁷² The decision-maker should take into account the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use. The decision-maker should have regard to any relevant local authority development plans or local impact report on the proposed development in respect of the factors set out in footnote 72 below.

5.12.13 There should be a presumption in favour of the conservation of designated heritage assets and, the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. Once lost, heritage assets cannot be replaced, and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building park or garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including Scheduled Monuments; registered battlefields; grade I and II* listed buildings; grade I and II* registered parks and gardens; and World Heritage Sites should be wholly exceptional.

⁷¹ Guidance on the available sources of information can be found in PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide, March 2010, or any successor document.

⁷² This can be by virtue of:

- heritage assets having an influence on the character of the environment and an area's sense of place;
- heritage assets having a potential to be a catalyst for regeneration in an area, particularly through leisure, tourism and economic development;
- heritage assets being a stimulus to inspire new development of imaginative and high quality design;
- the re-use of existing fabric, minimising waste; and
- the mixed and flexible patterns of land use in historic areas that are likely to be, and remain, sustainable.

- 5.12.14** Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that, the greater the harm to the significance of the heritage asset, the greater the justification will be needed for any loss. Where the application will lead to substantial harm to or total loss of significance of a designated heritage asset, the decision-maker should refuse consent unless it can be demonstrated that the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm. Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. The policies in the previous paragraphs apply to those elements that do contribute to the significance. When considering proposals, the decision-maker should take into account the relative significance of the element affected and its contribution to the significance of the World Heritage Site or Conservation Area as a whole.
- 5.12.15** Where loss of significance of any heritage asset is justified on the merits of the new development, the decision-maker should consider imposing a condition on the consent or requiring the applicant to enter into an obligation that will prevent the loss occurring until it is reasonably certain that the relevant part of the development is to proceed.
- 5.12.16** When considering applications for development affecting the setting of a heritage asset, the decision-maker should treat favourably applications that preserve those elements of the setting that make a positive contribution to, or that better reveal the significance of, the asset. When considering applications that do not do this, the decision-maker should weigh any negative effects against the wider benefits of the application. The greater the negative impact on the significance of the asset, the greater the benefits that will be needed to justify approval.

Recording

- 5.12.17** A documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of the asset should not be a factor in deciding whether consent should be given.
- 5.12.18** Where loss of the whole or a material part of a heritage asset's significance is justified, the decision-maker should require the developer to record and advance understanding of the asset's significance before this is lost. The extent of the requirement should be proportionate to the nature and level of the asset's significance. Developers should be required to publish this evidence and deposit copies of the reports with the relevant Historic Environment Record. They should also be required to deposit the archive generated to a local museum or other public depository willing to receive it.
- 5.12.19** Where appropriate, the decision-maker should impose requirements on a consent to ensure that such work is carried out in a timely manner in accordance with a written scheme of investigation that meets the requirements of this section and has been agreed in writing with the relevant local authority (and, where the development is in English waters, the Marine

Management Organisation and English Heritage⁷³ or where it is in Welsh waters, the MMO (and Cadw) and that the completion of the exercise is properly secured.⁷⁴

5.12.20 Where the decision-maker considers there to be a high probability that a development site may include as yet undiscovered heritage assets with archaeological interest, the decision-maker should consider requirements to ensure that appropriate procedures (for example, a written scheme of investigation) are in place for the survey, identification, analysis and treatment of such assets discovered before and during construction.

5.13 Land use including open space, green infrastructure and Green Belt

5.13.1 A port infrastructure project will have direct effects on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Given the likely locations of port infrastructure projects, there may be particular effects on open space,⁷⁵ including green infrastructure.⁷⁶

5.13.2 The Government's policy is to ensure there is adequate provision of high-quality open space, (including green infrastructure) and sports and recreation facilities to meet the needs of local communities.⁷⁷ Open spaces, sports and recreational facilities all help to underpin people's quality of life and have a vital role to play in promoting healthy living. Green infrastructure, in particular, will also play an increasingly important role in mitigating and adapting to the impacts of climate change.

5.13.3 The re-use of previously developed land for new development can make a major contribution to sustainable development by reducing the amount of countryside and undeveloped greenfield land that needs to be used. However, this may not be possible for some forms of infrastructure.

5.13.4 Green Belts, defined in a local planning authority's development plan,⁷⁸ are situated around certain cities and large built-up areas. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the most important attribute of Green Belts is their openness. For further information on the purposes of Green Belt policy see PPG2 or any successor to it.

⁷³ For guidance see *Ports: the impact of development on the maritime historic environment* (English Heritage, 2006) or any successor document.

⁷⁴ Guidance on the contents of a written scheme of investigation is set out in the Practice Guide to PPS5.

⁷⁵ Open space is defined in the Town and Country Planning Act 1990 as land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground. However, in applying the policies in this section, open space should be taken to mean all open space of public value, including not just land, but also areas of water such as rivers, canals, lakes and reservoirs which offer important opportunities for sport and recreation and can also act as a visual amenity.

⁷⁶ Green infrastructure is a network of multi-functional green spaces, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities.

⁷⁷ For Wales, relevant guidance is set out in the Welsh Government's Technical Advice Note 16: *Sport, Recreation and Open Space*.

⁷⁸ Or else so designated under The Green Belt (London and Home Counties) Act 1938.

Applicant's assessment

- 5.13.5** The ES should identify existing and proposed⁷⁹ land uses near the project, as well as any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing. Applicants should also assess any effects of precluding a new development or use proposed in the development plan.
- 5.13.6** Applicants will need to consult the local community on their proposals to build on open space, green infrastructure, sports or recreational buildings and land. Taking account of the consultations, applicants should consider providing new or additional open space, including green infrastructure, sport or recreation facilities, to substitute for any losses as a result of their proposal. Applicants should use any up-to-date local authority assessment or, if there is none, provide an independent assessment to show whether the existing open space, sports and recreational buildings and land are surplus to requirements.
- 5.13.7** During any pre-application discussions with the applicant, the local planning authority (LPA) should identify any concerns it has about the impacts of the application on land use, having regard to the development plan and relevant applications and including, where relevant, whether it agrees with any independent assessment that the land is surplus to requirements.
- 5.13.8** Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5), except where this would be inconsistent with other sustainability considerations. Applicants should also identify any effects and seek to minimise impacts on soil quality, taking into account any mitigation measures proposed. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination.
- 5.13.9** Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.
- 5.13.10** The general policies controlling development in the countryside apply with equal force in Green Belts, but there is, in addition, a general presumption against inappropriate development within them. Such development should not be approved, except in very special circumstances. Applicants should therefore determine whether their proposal, or any part of it, is within an established Green Belt and, if it is, whether their proposal may be inappropriate development within the meaning of Green Belt policy – see 5.13.17 below.
- 5.13.11** However, infilling or redevelopment of major developed sites in the Green Belt, if identified as such by the local planning authority, may be suitable for some forms of nationally significant infrastructure. It may help to secure jobs and prosperity without further prejudicing the Green Belt, or even offer the

⁷⁹ For example, where a planning application has been submitted.

opportunity for further environmental improvement. Applicants should refer to the relevant criteria⁸⁰ on such developments in Green Belts.

Guidance for the decision-maker

- 5.13.12** Where the project conflicts with a proposal in a development plan, the decision-maker should take account of the stage which the development plan document in England or local development plan in Wales has reached in deciding what weight to give to the plan for the purposes of determining the planning significance of what is replaced, prevented or precluded. The closer the development plan document in England or local development plan in Wales is to being adopted by the LPA, the greater the weight which can be attached to it.
- 5.13.13** The decision-maker should not grant consent for development on existing open space, sports and recreational buildings and land unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements, or the decision-maker determines that the benefits of the project (including need) outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities. The loss of playing fields should only be allowed where applicants can demonstrate that they will be replaced with facilities of equivalent or better quantity or quality in a suitable location.
- 5.13.14** Where networks of green infrastructure have been identified in development plans, they should normally be protected from development and, where possible, strengthened by or integrated within it.
- 5.13.15** The decision-maker should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. It should give little weight to the loss of poorer-quality agricultural land (in grades 3b, 4 and 5), except in areas (such as uplands) where particular agricultural practices may themselves contribute to the quality and character of the environment or the local economy.
- 5.13.16** In considering the impact on maintaining coastal recreation sites and features, the decision-maker should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast. In doing so, the decision-maker should consider the implications for development of the creation of a continuous signed and managed route around the coast, as provided for in the Marine and Coastal Access Act 2009.
- 5.13.17** When located in the Green Belt, port infrastructure projects may comprise 'inappropriate development'.⁸¹ Inappropriate development is by definition harmful to the Green Belt and there is a presumption against it. The decision-maker will need to assess whether there are very special circumstances to justify inappropriate development. Very special circumstances will not exist unless the harm by reason of inappropriateness,

⁸⁰ See Annex C to Planning Policy Guidance 2: Green Belts, or any successor to it.

⁸¹ Defined in section 3 of PPG2: Green Belts.

and any other harm, is clearly outweighed by other considerations. In view of the presumption against inappropriate development, the decision-maker will attach substantial weight to the harm to the Green Belt when considering any application for such development.

5.13.18 In Wales, ‘green wedges’ may be designated locally.⁸² Green wedges give the same protection in Wales as Green Belt in England. Green wedges do not convey the same level of permanence of a Green Belt and should be reviewed by the local authority as part of the development plan review process. As with Green Belt, there is a presumption against inappropriate development, and the decision-maker should assess whether there are very special circumstances to justify any proposed inappropriate development.

Mitigation

5.13.19 Applicants can minimise the direct effects of a project on the existing use of the proposed site, or proposed uses near the site, by the application of good design principles, including the layout of the project.

5.13.20 Where green infrastructure is affected, the decision-maker should, if necessary, consider imposing requirements to ensure the connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to new coastal access routes.

5.13.21 The decision-maker should also consider whether mitigation of any adverse effects on green infrastructure or open space is adequately provided for by means of any planning obligations, for example to exchange land and provide for appropriate management and maintenance agreements. Any exchange land should be at least as good in terms of size, usefulness, attractiveness, quality and accessibility. Alternatively, where sections 131 and 132 of the Planning Act 2008 apply, replacement land provided under those sections will need to conform to the requirements of those sections.

5.13.22 Where a proposed development has an impact upon a Mineral Safeguarding Area (MSA), the decision-maker should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources.

5.13.23 Where a project has a sterilising effect on land use, there may be scope for this to be mitigated through, for example, using the land for nature conservation or wildlife corridors, or for parking and storage in employment areas.

5.13.24 Rights of way, National Trails and other rights of access to land (e.g. open access land) are important recreational facilities, e.g. for walkers, cyclists and horse riders. The decision-maker should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails and other rights of way. Where this is not the case, the decision-maker should consider what appropriate mitigation requirements might be attached to any grant of development consent.

⁸² See section 4.7 of Planning Policy Wales (4e).

5.14 Socio-economic impacts

5.14.1 The construction, operation and decommissioning of port infrastructure may have socio-economic impacts at local and regional levels.

Applicant's assessment

5.14.2 Where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES (see section 4.7).

5.14.3 This assessment should consider all relevant socio-economic impacts, which may include:

- the creation of jobs and training opportunities;
- the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities;
- effects on tourism;
- the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion, depending on how populations and service provision change as a result of the development; and
- cumulative effects – if development consent were to be granted to for a number of projects within a region and these were developed in a similar timeframe, there could be some short-term negative effects, for example a potential shortage of construction workers to meet the needs of other industries and major projects within the region.

5.14.4 Applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development's socio-economic impacts correlate with local planning policies.

5.14.5 Socio-economic impacts may be linked to other impacts – for example, the visual impact of a development is considered in section 5.11 but may also have an impact on tourism and local businesses.

Guidance for the decision-maker

5.14.6 The decision-maker should have regard to the potential socio-economic impacts of new port infrastructure identified by the applicant and from any other sources that the decision-maker considers to be both relevant and important to its decision.

5.14.7 It is reasonable for the decision-maker to conclude that limited weight is to be given to assertions of socio-economic impacts that are not supported by evidence.

5.14.8 The decision-maker should consider any positive provisions the developer has made through developer contributions and any legacy benefits that may arise, as well as considering any options for phasing development in relation to the socio-economic impacts.

Mitigation

5.14.9 The decision-maker should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development. For example, high-quality design can improve the visual and environmental experience for visitors and the local community alike.

DfT
January 2012

Glossary

The acronyms, abbreviations and terms listed below are either used in this policy statement, or may be found elsewhere in related links:

AONB	Area of Outstanding Natural Beauty
AoS	Appraisal of Sustainability
AQMA	Air Quality Management Area
BS	British Standard
CNI	Critical National Infrastructure
CO ₂	Carbon dioxide
CPNI	Centre for the Protection of National Infrastructure
DCLG	Department for Communities and Local Government (formerly ODPM)
DEFRA	Department for the Environment, Food and Rural Affairs
DfT	Department for Transport
EA	Environment Agency
EfW	Energy from waste
EIA	Environmental Impact Assessment
EP	Environmental Permitting
EPA	Environmental Protection Act
ES	Environmental Statement
EU	European Union
FEPA	Food and Environment Protection Act 1985
FRA	Flood Risk Assessment
GHG	Greenhouse gases
GO	Government Office
HGV	Heavy goods vehicle
hi-cube	A 9ft 6in high container
HRO, HEO	Harbour Revision/Empowerment Order
HSE	Health and Safety Executive
IPC	Infrastructure Planning Commission
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
LPA	Local planning authority
MCA	Maritime and Coastguard Agency
MCZ	Marine Conservation Zone
MDS, MDST MDS	Transmodal (consultants)
MFA	Marine and Fisheries Agency
MMO	Marine Management Organisation
MOD	Ministry of Defence
MPS	Marine Policy Statement
NIU	National Infrastructure Unit
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
ODPM	Office of the Deputy Prime Minister
PPG	Planning Policy Guidance
PPS	Planning Policy Statement

pSPA	Potential Special Protection Area
RDA	Regional Development Agency
ro-ro	Roll-on/roll-off (freight and/or passenger ferry transport)
SAC	Special Area of Conservation
SECA	SO ₂ Emissions Control Area (at sea)
SO ₂	Sulphur dioxide
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TCPA	Town and Country Planning Act 1990 (as amended)
teu	Twenty-foot equivalent unit (standard measure of container volume; forty-foot containers (2 teu each) are increasingly prevalent)
TRANSEC	Transport Security Division (DfT)
Transshipment	Transfer of goods (usually containers) from one ship to another through a port
TSO	The Stationery Office
W10	Rail loading-gauge allowing the use of 9ft 6in containers
WHS	World Heritage Site