

Water preferred policy

guidelines for the movement of abnormal
indivisible loads

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1 Introduction

- 1.1 An abnormal indivisible load means a large or heavy object which is indivisible into smaller parts without undue expense or risk of damage and, when placed on a vehicle, results in the attributes of that vehicle exceeding the normal legal restrictions on maximum vehicle dimensions or weight.
- 1.2 The Secretary of State for Transport individually authorises the movement by road in Great Britain of the largest and heaviest abnormal indivisible loads that are any combination of the following: over 150 tonnes gross vehicle weight; over 30 metres rigid length; or over 5 metres wide. This is because these loads cause significant traffic congestion and disruption to road users and require greater safety mitigation.
- 1.3 Since the 1960s the Government has had a stated policy of using coastal shipping for moving the largest and heaviest abnormal loads from the nearest convenient port. Similarly loads for export are required to leave by the nearest port to the place of manufacture.
- 1.4 In March 2002 'Freight on the Water', the report of the Freight Study Group, identified and described over 20 waterways in detail giving information on depths, navigability and other limiting measurements. It also recognised power stations as the main recipients of some of the heaviest abnormal indivisible loads and that many are located adjacent to water. In response to the report's recommendations the Government announced its intention to adopt a water preferred policy, extending the existing policy of using coastal ports to include the use of inland waterways. The aim of which was to take slow-moving abnormal loads off the road network offering real benefits in terms of reducing disruption and congestion. Formally the policy amounted to two actions:
- (i) When the largest abnormal loads were to be moved, the possibility for moving by inland water had to be considered.
 - (ii) If an inland water move was practical, economic and environmentally desirable, permission would be refused for the load to travel by road only.
- 1.5 For individual or ad hoc moves the evidence to date indicates that the cost of moving by inland water is often more expensive than road transport costs, even when the cost of traffic congestion to the economy is included. The various reasons for this include the cost of investigative work; the cost of facilitating a landing if necessary; and lack of existing suitable infrastructure.
- 1.6 However, if repeat moves are likely over the longer term then water transportation can be shown to be more cost effective than road transportation. The extent of long term planning is to be agreed in consultation with the relevant industry but it could be as long as 20 years. Consequently, the Highways Agency (Agency) has facilitated strategic reviews with electrical producers and major manufacturers to agree the transport arrangements for using water for sites where there is potential for multiple moves. Efforts have been concentrated on those industries which move the largest and heaviest abnormal loads as these cause the most traffic congestion.

- 1.7 These reviews have resulted in many agreements which describe sites that have potential for the delivery route (or a greater proportion of the route) to be by water.
- 1.8 The strategic reviews carried out by industry have significantly reduced the number of water investigations. However, applications for individual or ad hoc moves of the largest and heaviest abnormal loads are still submitted and it is in these cases where clarity as to how the policy is applied is particularly needed.

2 Water preferred policy

2.1 Policy background

- 2.1.1 It is recognised that the manufacturing and electrical industries need to transport abnormal loads internally within GB (many movements of which originate from overseas) and also for export. However, this has to be balanced with the disruption and traffic congestion to other road users, together with the impact this has on the UK economy, when compared to any extra costs or difficulty associated with using alternative transport modes.
- 2.1.2 The guidelines include indicative financial thresholds to determine the point at which inland water use becomes uneconomic for ad hoc moves. It should be emphasised that these are indicative thresholds that can be overridden in the light of special or mitigating circumstances which can be shown to apply in a particular case. A decision to override the indicative thresholds can equally apply to cases that support either a water or road move.
- 2.1.3 The indicative financial thresholds referred to above only cover the use of inland water, or non-established ports, for ad hoc or unpredictable abnormal load movements where it is not possible to establish a long term or high volume pattern of movements. The longstanding policy of using coastal shipping for moving abnormal loads to and from the nearest convenient established port is unaffected. Where a long term use (ie repeat moves) or multiple moves within a project or programme for moving the largest and heaviest abnormal loads can be shown we will negotiate strategic agreements with applicants whereby individual strategies on whether a road or water route is to be used on a site-by-site basis are agreed. The indicative financial thresholds do not apply to these strategic agreements.

2.2 General policy statement

- 2.2.1 This section sets out the Government's water preferred policy to which the guidelines apply.
- 2.2.2 An abnormal indivisible load is defined in The Road Vehicles (Authorisation of Special Types) (General) Order 2003 as -

A load that cannot without undue expense or risk of damage be divided into two or more loads for the purpose of being carried on a road and that -

- a) on account of its length, width or height, cannot be carried on a motor vehicle of category N3 or a trailer of category O4 (or by a combination of such vehicles) that complies in all respects with Part 2 of the Construction and Use Regulations; or
- b) on account of its weight, cannot be carried on a motor vehicle of category N3 or a trailer of category O4 (or by a combination of such vehicles) that complies in all respects with –
 - i. the Authorised Weight Regulations (or, if those Regulations do not apply, the equivalent provisions in Part 4 of the Construction and Use Regulations); and
 - ii. Part 2 of the Construction and Use Regulations.

- 2.2.3 To minimise the impact on the road network of the Special Order (SO)¹ and VR1² category abnormal loads, it is government policy to avoid road transport as far as possible by using alternative transport modes, such as water.
- 2.2.4 To reduce the distance that abnormal loads move by road, coastal waters will continue to be the preferred transport mode over longer distances. This means taking the load by road to the nearest coastal port unless there is a nearer suitable abnormal load landing facility. Beach landings should also be considered where appropriate. Where the use of inland waterways has the potential to reduce the road journey their use should be considered wherever this is practical, economic and environmentally desirable.
- 2.2.5 Each case is considered on its own individual merits. Generally the greater the road mileage then the more persuasive the arguments for using water. It is not possible to define the criteria governing every case, as many factors (such as the nature of the load, its start and finish points, roadworks and the road route) will influence the decision.
- 2.2.6 Businesses that need to move or rely on the largest and heaviest abnormal loads for their operation must consider alternative modes of transport to road, where a potential water option exists, and put in place the necessary strategic plans ahead of any moves. We will not grant permission to move by road unless the applicant has conducted appropriate investigations into water options. Some of the issues that will need to be investigated are set out at Appendix 3.
- 2.2.7 A chart showing the critical questions and influencing factors involved in the decision process is at Appendix 1.
- 2.2.8 If an abnormal load is permitted to travel by road a number of measures are employed to reduce its impact. These include minimising the road mileage,

¹ Special Order Loads are over 150 tonnes gross vehicle weight, greater than 6.1 metres wide or over 30 metres rigid length.

² VR1 loads are under 150 tonnes gross vehicle weight and less than 30 metres rigid length but have a width of between 5 and 6.1 metres.

making sure the most appropriate roads are used (the strategic road network), checking whether the load is further divisible or if different load configurations will reduce its size, and moving it at off-peak times (including at night time).

3 Water preferred policy guidelines

3.1 Which loads should be moved by water?

3.1.1 We are only able to influence the movement of SO and VR1 abnormal loads. In principle making use of water as an alternative to road applies to the largest and heaviest of these loads.

3.1.2 This is because they cause the most traffic congestion and impact adversely on journey time reliability. These tend to be:

- heavy loads over 150 tonnes gross vehicle weight
- wide loads over 5m in width
- long loads over 30m in length which exceed a typical carriageway width of 3.5m.

3.1.3 Other factors that influence the need for water to be considered include:

- loads that are starting and finishing their journey either at or by water
- when the distance by road is significantly reduced by using water
- where there are multiple loads with the same start and finish points
- abnormal loads that are part of any large-scale project or programme involving the movement of many pieces.

3.1.4 The lack of a landing facility should not in itself be a barrier to using a particular navigation. Businesses with a site adjacent to waterways must explore direct access to and from the water where practical. There are vessels that have lift-on/lift-off and roll-on/roll-off facilities that will influence the type and extent to which a facility is needed.

3.2 Which loads are generally permitted to move by road?

3.2.1 Wide loads between 5 metres and 6.1 metres wide but under 150 tonnes gross vehicle weight are normally permitted to travel further by road, but this is often dependant on the road route and timing of the move. For example a road journey between two ports would not normally be permitted.

3.2.2 Loads over 30 metres long, assuming that they are not abnormal in any other way, are usually permitted to travel by road, providing access to and from the main motorway network is suitable. The distance permitted to travel off the motorway network will depend on the route because these loads have a similar affect to a wide load, taking up both lanes of a dual carriageway or both sides of a single carriageway road when negotiating a bend or junction. Long, wide loads would not normally be permitted to move significant distance by road. Where there is a programme of movements the advice at paragraphs 3.6 and 3.7.1 should be considered.

3.3 Is there a case on the grounds of road safety for refusing a road move in favour of water?

3.3.1 It is unlikely that safety will be the overriding factor in determining if a water option must be used. Abnormal loads are moved regularly on the road network and adequate provisions will be made to secure a safe passage. If the most direct route is unsuitable then an alternative route will be used.

3.4 What are applicants expected to do when applying to move a load?

3.4.1 Applicants wishing to move the largest or heaviest abnormal loads by road should contact our abnormal indivisible loads (AIL) team in the first instance, ideally at pre-tender stage. Should applicants not contact us at a sufficiently early stage then this could result in delay to their programme as we have the power to refuse route approval until such time as it has been satisfied that all the transport options have been considered. Many of the applications to move by road will be unaffected by the water preferred policy because their journey is either wholly inland with no nearby suitable waterways, or involves moving a small number of long loads or prior agreement on the mode of transport has been reached.

3.4.2 If the use of a non-established port or waterway is a potential option the applicant will be expected to present a high level review to assess viability. The review is to include a comparison of the costs of both road and water options using the water pro-forma (see Appendix 2). This high level review will help to identify if there are any obvious reasons why the water option should not be used and keep any investigative costs to a minimum.

3.4.3 Many loads transported in the UK are moved to and from the continent and consideration should be given to employing the same vessel on both the coastal and inland waterway components of a move as this will avoid transshipment costs.

3.4.4 Further advice on the option of using inland waterways, including issues such as vessel availability, can be obtained from Freight by Water (FBW) (www.freightbywater.fta.co.uk) and the Commercial Boat Operators Association (CBOA) (www.cboa.org.uk). FBW is the official body for promoting waterborne freight. The CBOA is a trade association representing firms which carry cargo and provide engineering services on Britain's inland waterways. Similarly, advice on road haulage issues can be sought from the Freight Transport Association (www.fta.co.uk), the Road Haulage Association (www.rha.net), and the Heavy Transport Association (www.hta.uk.net).

3.4.5 The high-level review will often give enough information to confirm if the load can move by road, however for more complex options we may require further investigations. The scope of this work should be agreed with the AIL team prior to any work being undertaken. Where there are clearly one or more water options applicants are encouraged to consult the team early to agree the water options and the scope of the investigations needed. Allowing enough time to reasonably carry out investigations is crucial and expected.

- 3.4.6 To aid water investigations, a list of the principle factors that applicants need to consider is given in Appendix 3. To minimise costs it is suggested those factors which appear to be the most likely to prevent a move by water are investigated first and the analysis is kept initially to a high level. This will ensure that the most efficient use of resources is made. It is not possible to define which factors should be examined first as they tend to be site specific.
- 3.4.7 Important factors to be considered when using water include surveys, dredging and environmental issues. These take time to investigate, so it is essential to allow sufficient time for this to take place. There also needs to be a suitable road route to and from the site. If this is a public road, approval from the AIL team will be required and this can be done in parallel with the water investigations.
- 3.4.8 We have no authority to sanction a move by water. It is for the applicant to obtain the appropriate approvals from the navigation authority and other relevant bodies. If we refuse to permit a load to move by road and the applicant is subsequently unable to obtain the appropriate approvals to move by water we will reconsider our decision.

3.5 The importance of consulting us early

- 3.5.1 From an applicant's perspective it is important they know if permission is likely to be given for a road route prior to entering into contractual agreements with third parties. Making an assumption that a road move will be permitted would result in a delay in completing an order if alternative transport options such as water have to be investigated.

3.6 Strategic reviews with the power and heavy manufacturing industries

- 3.6.1 Loads that cause the most traffic congestion and impact adversely on journey time reliability are generally heavy (loads over 150 tonnes gross vehicle weight which are subject to a speed restriction of between 12 – 25 mph dependent on vehicle type) and wide (loads over 5m in width). Primarily such loads are moved by the power industry, as well as heavy manufacturing industries, and these businesses should undertake a strategic review of their operations in collaboration with the AIL team. The aim would be to agree individual strategies on whether a road or water route is to be used for abnormal load movements on a site-by-site basis. Shipping to the nearest coastal port is expected to be the minimum requirement but the use of inland waterways should also be considered for each operational site.
- 3.6.2 Strategic reviews are also appropriate for projects or programmes which involve multiple moves of SO or VR1 category abnormal loads.
- 3.6.3 These reviews allow a long term view to be taken. Assessing individual moves may allow initial infrastructure investment to be offset against repeat moves in the longer term. If permanent waterside facilities are established and used for repeat moves then water transportation can be shown to be more cost effective than road transportation.

- 3.6.4 Whether or not it is reasonable to build or upgrade a loading/unloading facility on a waterway will depend on a number of factors often specific to the individual location and operation. Once a port of access has been agreed for a specific site we will, on request, issue an agreement in principle (AiP) letter which will confirm that we will permit road moves to and from the specified port. This is normally valid for seven years, subject to a more appropriate water option becoming available during that period. The AiP does not confer approval of the road route. Abnormal load movements on the route will still have to be subject to a formal application nearer the time, at which point we will have to consult with all relevant parties and take into consideration their views and requirements.
- 3.6.5 The scope and degree of any strategic review should be agreed with us to ensure a consistent and cost effective approach is undertaken. Having a strategy in place would help ensure that approvals to move a load by road are processed without undue delay. Applicants should, if they have not already done so, conduct a strategic review of their site(s) to ascertain if there are nearer water options available that could be used.
- 3.6.6 Strategic reviews are not subject to the indicative financial thresholds set out at section 3.8 of these guidelines, but still require investigation to determine if moves are practical, environmentally desirable and economic.
- 3.7 Reaching a decision to permit a road or water move for ad hoc or unpredictable abnormal load moves**
- 3.7.1 The expectation is that the strategic reviews and resultant site specific agreements with industry will cover the vast majority of movements of the largest and heaviest abnormal loads. Consequently water investigations are expected to be limited to a small number of applications for ad hoc moves where it is not possible to establish a long term or high volume pattern of movements.
- 3.7.2 Where the applicant is applying to move a wide and heavy load by road and there is a water option the onus is on them to show why it should not be used. Water investigations should be conducted in accordance with section 3.4
- 3.7.3 The procedure followed by the AIL team in processing applications is outlined in Appendix 4.
- 3.7.4 The team considers each road application individually. Any decision reached to refuse a road move in favour of a waterway or non-established abnormal load port should be on the grounds that movement by water is:
- practical
 - environmentally desirable
 - economic.

3.7.5 **Practical grounds**

This describes whether there are any physical or technical reasons that prevent the load being moved by water. This primarily relates to whether the three elements of the waterway, infrastructure and road route are suitable. For example, is the water navigation able to accommodate the size of load and is there, or could there be, a waterside facility close to the load's destination?

3.7.6 **Environmentally desirable grounds**

A water move will generally be environmentally justified if it brings about an overall reduction in congestion when compared to a road only move.

3.7.7 Loads that require lift on/lift off operation, where there is no permanent dockside craneage available, will require the services at either end of the water section of a suitable mobile crane. The type of crane normally required to lift an abnormal load will be large and probably require numerous ancillary ballast and boom carriers. These are also abnormal loads and the congestion caused by moving this ancillary equipment will have to be considered.

3.7.8 **Economic grounds**

Costs of using water, including taking into account any congestion cost, should not be disproportionately higher than a road option and we use indicative financial thresholds to determine whether this is the case. If there are no practical or environmental difficulties, a decision is based upon comparing the costs between water and road in a reasonableness test. Consideration is also given to the total additional cost of travelling by water in relation to the cost of the component(s) being moved.

3.7.9 For road moves operational costs specific to each move include:

- escorting (whether by private firm or by the police)
- cost of removing/protecting street furniture and utilities
- planning costs
- cost of bridge or structural assessments and strengthening if required
- congestion and related externality costs – where these can be measured
- risk allowance (eg insurance etc)
- traffic management.

3.7.10 For water moves operational costs specific to each move include:

- shipping costs including waterway charges and port/berth fees
- costs, fees and risks involved in extra planning and surveying accrued after it has been agreed that a water move is viable
- infrastructure costs such as upgrading, dredging (but only that which is necessary due to the vessel being above the size which the navigation authority are statutorily obliged to allow on the waterway) and civil works to prepare ground or landings
- craneage (although this will be avoided if roll on/roll off vessels are used)

- cost of road portions of journey where applicable
- congestion and related externality costs for road portions of journey – where these can be measured
- risk allowance (eg insurance, mitigation measures etc).

3.7.11 When comparing road and water it is important to take into account the cost impact of any road congestion. Other factors are also considered, such as social and environmental impacts associated with moving these loads by road.

3.7.12 We calculate congestion, in terms of both cost to the UK economy and the impact on vehicle delay, using a model we have developed. The congestion calculation draws information on road behaviour from a number of sources for any day or time. The research on congestion utilises how vehicle size and speed influences the other road users. The model uses this information to calculate how much delay is caused and from this the cost of congestion. Details of the model are available from the Agency’s research compendium at

www.highways.gov.uk/knowledge_compendium/F1DB5EE2333E4B07A3A0A5155AD19DD9.aspx

3.7.13 Where there is no permanent dockside craneage available and loads require transshipping by crane the cost of moving the mobile crane equipment to/from the dockside (including the cost of congestion) needs to be factored in to the cost comparison.

3.8 Indicative thresholds for assessing financial reasonableness in respect of ad hoc and unpredictable moves

3.8.1 Two indicative cost thresholds are sequentially applied, comparing the total cost of travelling by inland water (including any road component and associated congestion cost) against both the value of the component(s) being moved and against the total cost of moving by road including any congestion costs that can be calculated.

3.8.2 The first stage in determining financial reasonableness is to compare the additional cost (if any) of water transport with the value of the component(s) being moved. If the total additional cost of travelling by water (ie the cost of water above the cost of road transport including the cost of congestion) exceeds 20% of the value of the component(s) then a road move will generally be permitted.

This means a road move will be permitted if:

$$\left(\begin{array}{l} \text{water cost + any road cost +} \\ \text{road congestion cost} \end{array} \right) - \left(\begin{array}{l} \text{road only cost + road} \\ \text{congestion cost} \end{array} \right) > 20 \% \text{ of component value}$$

3.8.3 The purpose of using the component(s) value to determine if the load should be allowed to move by road is to ensure that our decisions are reasonable. This

protects many smaller industries where the additional cost of a move by water would represent a disproportionately high impact and make their operation uneconomic. The 20% value has been determined based on our experience with the aim that transport costs do not form an excessively large percentage of the component value.

- 3.8.4 If the total additional cost of moving by water is within 20% of the component(s)' value we next compare the comparative costs of the road and water options. In comparing the comparative costs of road and inland water options we apply an indicative threshold; this is applied as follows:

Permission to move by road will be granted only if the water transport cost is more than the cost of traffic congestion plus 2 times the base road transport cost.

This means a road move will be permitted if:

$$\left(\begin{array}{l} \text{water cost + any road cost +} \\ \text{road congestion cost} \end{array} \right) > \left(\begin{array}{l} \text{congestion cost of} \\ \text{road only option} \end{array} \right) + \left(\begin{array}{l} \text{2 x cost of road} \\ \text{transport} \end{array} \right)$$

- 3.8.5 The two times threshold was derived following consideration of historical information with the aim of maintaining the same level of decisions as practised since the water preferred policy was introduced in 2002.
- 3.8.6 Two worked examples of the application of the financial reasonableness test are set out below:

Example 1: An SO weight load going from a coastal port to a site on an inland waterway directly accessible by water.

Cost of piece is £1,500,000

Cost of water transport including infrastructure improvements is £350,000

Base cost of road transport is £52,000

Congestion cost is £30,000

In this case the additional cost of water above the road transport costs (including congestion) is £268,000. This falls within 20% of the component's cost (ie £300,000).

Permission to move by road will be allowed only if the water transport cost (£350,000) is more than the cost of traffic congestion (£30,000) plus 2 times the base road transport cost. So the threshold is £30,000 + (£52,000 x 2)

$$= £30,000 + £104,000$$

$$= £134,000$$

In this case the load would be allowed to move by road.

Example 2: An SO weight load going from a coastal port to a site on an inland waterway directly accessible by water.

Cost of piece is £500,000

Cost of water transport is £90,000

Base cost of road transport is £50,000

Congestion cost is £5,000 (load able to move mostly at night)

In this case the additional cost of water above the road transport costs (including congestion) is £35,000. This falls within 20% of the component's cost (ie £100,000).

Permission to move by road will be allowed only if the water transport cost (£90,000) is more than the cost of traffic congestion (£5,000) plus 2 times the base road transport cost. So the threshold is £5,000 + (£50,000 x 2)

$$= £5,000 + £100,000$$

$$= £105,000$$

In this case the load would be not allowed to move by road.

- 3.8.7 It should be emphasised that these are indicative thresholds that can be overridden in the light of special circumstances which can be shown to apply in a particular case. The reasonableness test only applies to the use of waterways and non-established ports; it does not apply to the use of coastal ports.

3.9 Further information

For further information please contact the AIL team on **0121 678 8068** or write to:

Highways Agency
AIL team
9th Floor, The Cube
199, Wharfside Street
Birmingham
B1 1RN
Email: abnormal.loads@highways.gsi.gov.uk

Appendix 1: Water preferred policy and decision making chart

Decision making process for abnormal loads

Step 1

Questions to consider before permitting the load to travel by road

Can load size be reduced by changing load config or vehicle type?

Is the load divisible without major expense?

Is the load justified in moving?

Can another mode of transport be used?

Is it technically possible to move the load?

How much disruption / traffic congestion will be caused?

How many loads are there?

Step 2

Questions to consider before permitting the move by water

Is road mileage to and from water less than a direct road route? (It normally should be)

Is it more expensive to go by water, including the congestion costs, and if so by how much?

Is the time needed to organise a water move prohibitive? (Late applications are not justifiable)

Step 3

Some or all of the following factors might influence the decision to use water or road

Practicabilities

Actual distance travelled by road and suitability and type of roads being used (motorway vs local roads & disruption)

Availability of suitable vessels

Availability of navigation (drought/flooding/high-low tides/need for dredging)

Availability and suitability of jetties/wharves (temporary or permanent)

Availability/cost/ disruption/risk of using cranes

Timing – planning permission required for infrastructure

Environmental impact

Disruption and congestion costs to road users (varies according to road type, size & weight of load, timing etc)

Disruption/impact on local residents

Availability and confidence of congestion cost figures

Timing of move (peak/off-peak timing and impact on congestion)

Environmental factors (ie water – flood defences, wildlife constraints, dredging etc)

How many loads need to be moved and can other loads be incorporated to reduce costs

Financial/business impact

Higher costs of using water on business (ie lost orders (export) /lost jobs) Additional costs associated with a road move

Increased risk to project programme delivery. (eg liquidated damages)

Cost of transport against cost of component being moved and/or total cost of project

Possible economies from having multiple loads

Ability to plan for water – large scale projects/ individual moves

Need to move loads in an emergency (eg transformers)

Appendix 2: Water pro-forma

This form must be completed by the heavy haulier to establish possible water options for an abnormal load. The applicant is asked to complete all of the tables. Where information cannot be supplied they are asked to give reasons. All costs provided will be treated as confidential. [The note boxes are for additional comments; however, if there is insufficient space additional comments can be submitted separately].

1. Summary table

No	Summary	From	To				Final UK destination ³
1	Journey start and finish points Please give details of the location where the load is being collected from ie the point of origin followed by a description of the route being proposed to transport the piece/s.						
2		Mileage				Cost £k	
3	Water option 1 - road miles	Total	1st leg	2nd leg			
4	Water option 2 - road miles	Total	1st leg	2nd leg			
5	Water option 3 - road miles	Total	1st leg	2nd leg			
6	Road option - road miles						
	Justification for not using water for each option - if applicable						

³ If different from previous column

2. General table

No	General								
8	Describe the abnormal load(s)								
9	Overall dimensions of the piece(s)	Height		Width		Length		Weight	
10	Overall dimensions when loaded on vehicle	Height		Width		Length		Weight	
11	Number of loads								
12	Are repeat loads along same route likely? Please give details								
13	Number of road movements								
14	Value of each load £k					Total value of load(s) £k			
15	Date of first/last movement			Date of application					
16	Your reference								
17	Other information (eg wider project details/timing/urgency)								

3. Water option table

No	Water option										
18	Describe below which water routes ⁴ have been investigated (consider reasonable alternatives, not just parallel to road route). In most cases there will only be one water route but the form does provide space for up to three if appropriate.										
19	Option	From	Wharf y/n	Lift ⁵	To	Wharf y/n	Lift	Via	Wharf y/n	Lift	Sea/waterway
20	1										
	2										
	3										
21	Preferred water option number										
	If not the shortest road mileage please justify why this option is chosen										
22	Has the load already travelled part of its journey by water? If so please describe										
23	Justification for not using water										

⁴ Sea or waterway

⁵ Roll-on roll-off (RR), lift-on lift-off (LL), mobile crane (MC), fixed crane (FC), heavy lift ship (HLS)

Water option table (continued)

24	If in row 23 time constraints are cited as justification for not using water, please explain why sufficient time has not been allowed to properly consider the water option.	
25	Explain why more than one load cannot be moved at a time by water or stored to reduce craneage costs	
26	If delays are likely due to eg planning permission for wharf, ground works explain	
27	Any other relevant information	Continue if necessary by extending the table

5. Water option - road element (if applicable)

No.	Water option – road element if applicable. In most cases there will only be one route option but the form does provide space for up to three if appropriate							
30	Describe proposed road route (include proposed start time for each leg of journey)							
31	Day	Time 24 hr	Road name/rest points	Road class/ number	Number of lanes (S or D)	Length (Miles)	Speed (mph)	Notes
Opt 1								
Opt 2								
Opt 3								
							Continue if necessary by extending the table	

6. Breakdown of costs

No.	Breakdown of costs					
32	Cost of travelling by road	£k	Notes	Cost of travelling by water	£k	Notes
33	Road transport			Water transport		
34	Escorting			Craneage		
35	Street furniture removal			Dredging		
36	Bridge assessments			Infrastructure		
37	Bridge strengthening			Survey		
38	Risk allowance			Waterway charges		
39	Other			Berth/port fees		
40				Risk allowance		
41				Other		
42				Road element, if applicable		
43				Road transport		
44				Escorting		
45				Street furniture		
46				Bridge assessments		
47				Bridge strengthening		
48				Risk allowance		
49				Other		Continue if necessary by extending the table
50	Total	0		Total	0	

Appendix 3: Water option assessment: Tables of technical scoping issues

Waterway(s)	
Theme	Also including:
Location	Coastal Estuary River Canal <i>Note: The possible options for a water move should identify all waterways of relevance.</i>
Transshipment	Location Nature <i>Note: This ties-in with transport requirements external to UK. The need for, the implications and practicalities of transshipment are relevant especially if alternative routings are to be considered.</i>
Dimension limitations	Depth/draft Vessel dimensions Air draft Structures (locks etc) Dredging needs – spot or general <i>Note: Physical limitations of potential waterway options needed for check on practicalities and capacity to accommodate the items and potential vessels. Dredging implications can be significant.</i>
Tides	Range Influence on operational timing <i>Note: In some waters, this will significantly affect the opportunity windows for water move and will impact on vessel type and capabilities.</i>
Hydrology	Flood Low flow Operational timing limits Other implications <i>Note: Incidence and likelihood of flood events, low flow/water levels and other phenomena (eg tidal bores). Practical implications of dealing with such events are relevant and they may impact upon movement timing.</i>
Navigation authority views	<i>Note: Views of the navigation authority on possibilities are relevant, together with information on recent or expected events and developments. Dredging need and plans can be discussed.</i>
Other views	Environment Agency Port operator Other users Particular riparian owners Structure owners/operators <i>Note: The Environment Agency is important to determine where flooding, contamination and environmental conservation issues might arise. Limitation on the use or transiting of structures need consideration, especially if unusual waterway traffic may be involved. Others with interests in use of or access to the waterway can affect options in terms of timing and access.</i>
Vessel	Size Capacity Capability Availability <i>Note: Vessel options should be considered, together with availability issues, to match with waterway and landing point options and constraints.</i>

Environment and ecology	<p>Conservation limitations Protection designations and limitations <i>Note: Bodies with conservation interests both general and particular may be involved. Further involvement here of the Environment Agency on aquatic and other conservation issues.</i> <i>Ecological interests may also arise.</i> <i>Necessary to establish protection designations, international, national and local and all involved bodies.</i> <i>Dredging can be a notable issue in some cases.</i></p>
Social and amenity	<p>Sensitive neighbours <i>Note: This is to tie together concerns of and effects upon other interests in the waterway itself and its environs. Proposal for mitigation should be outlined where relevant. It is hoped that these impacts would be minor and transitory in line with the objective of using waterways in general.</i></p>
Timing and programme	<p>Other users Interferences <i>Note: Again these other interests concerns may encompass limitation of use of the waterway</i></p>
Permits required	<p>Navigation Authorities Environment Agency Other <i>Note: Arising from the ownership and regulatory regimes at the site, several permits may need to be applied for, negotiated and received. The number, information requirements and timing implications of the various permits need to be established. These can arise from navigation requirements, flood protection, environmental and water conservation issues, land-use planning, ecological conservation, landownership and access etc. Permits involve application procedures and consultation periods and these impose project timescale constraints.</i></p>

Landing point(s)	
Theme	Also including:
Type	Existing Port Wharf, Green field Active/inactive <i>Note: Starting situation for any potential landing point needs to be defined. The issues will vary depending upon the basic nature of the site; use of an existing port or wharf will be different to resurrecting a disused facility or creating one from scratch. This will have direct bearing on practicality, possible timescale and costs.</i>
Current facilities	Surfacing Handling equipment Storage Security <i>Note: This adds further detail to the basic situation outlined above.</i>
Current use(s)	Other users Other interested parties Interference Timing limitations <i>Note: Ditto note above.</i>
Water approach limitations	Physical dimensions Timing Effects on users/facilities Dredging <i>Note: The physical limitation on the final approach of the vessel to the berth needs to be checked for adequacy and/or amendment. The approach timing will need to be co-ordinated around existing users and other physical limitations. Dredging to some extent may well be needed and the implications of this accommodated.</i>
Alongside	Water depth and variations Quay/bank height and variations Berth length Mooring facilities Dredging requirements <i>Note: All the practical requirements for berthing the vessel need to be evaluated and amended or accommodated as appropriate. Dredging requirement may arise.</i>
Transfer options	Ro-ro Lo-lo etc <i>Note: The choice of mode of loading/unloading will, in technical terms, depend initially upon the waterway capacity for available vessels and working space at the landing point. However, many of the other issues here will also have some bearing on any final selection.</i>
Space	Crane deployment Lifting operations Trailer operations Run-off area Lay down area
Structural capacity	Ground Quay wall Immediate access route Surfacing Sub-surface structures At working area and access/exit <i>Note: This will be significant for heavy items and more so for lo-lo operations.</i>
Flood and flood defences	Structures/facilities Operational timing limits Accommodation works <i>Note: The existence of flood defence works and the need to transit them will present physical limitations on access option. May also raise issues of maintenance of protection during move operations and of the reinstatement of any affected works.</i>

Landing point(s)	
Theme	Also including:
Accommodation works (temporary or permanent)	Water approach Berth Road access Landing point Reinstatement Planning implications <i>Note: These can give rise to major cost and preparation implications. Most other issues are likely to have some bearing on the need and extent of such works.</i>
Owner and/or operator	Landing point Access Short term/one off use Longer term use <i>Note: Land ownership interests can be difficult and conflicting and resolution protracted. Especially so where a new site is under consideration or where intervening ownership changes cast doubt on any previous arrangements. There may be restrictive covenants on the land.</i> <i>This issue can easily override technical feasibility.</i> <i>Operator powers and limitations may be relevant.</i>
Availability	Dependencies Conditions/limitations Responsibility <i>Note: This is linked particularly to the ownership/operator issue. Whether and when a new or resurrected site may be available and for how long will affect project timing and could influence investment decisions. Use of an existing facility is not free of these points. New or resurrected sites may additionally have unclear or non-existent lines of responsibility for permitting this type of use.</i>
Regulatory constraints on utilisation	Planning Environment Agency Navigation authorities Facility operator <i>Note: It is vital to check this aspect with the relevant and possibly relevant permitting authorities. Can contain severe and/or unexpected limitation on the principles and practicalities of use of a landing site.</i>
Environment and ecology	Conservation limitations Protection designations <i>Note: This is further area of regulatory control that will impact upon use of a site. Aspects of or the whole of a site and/or its environs may well be subject to conservation limitations and other statutory protective designations which could place limitations and conditions on its use. These will need to be agreed with the relevant authority or body. The Local Planning Authority would be the first call towards establishing these interests.</i> <i>Ditto Waterway table issue note.</i>
Social and amenity	Sensitive neighbours Other users <i>Note: Similar issues arise to those for the Waterway table.</i>
Insurance and indemnity	<i>Note: This particularly links with ownership and operator issues. But it also arises from the potentially novel transportation mode and activities. New aspects of risk management may well arise.</i>
Permits required	Planning authority Environment Agency Navigation authority Owner Operator Other <i>Note: Similar to Waterway table issues.</i>

Road route(s)	
Theme	Also including:
Route options	Main options and status
Particular option limitations	
Access to public highway network	Negotiability and bearing capacity Structures Gateways Other limitations Other users
Distances	Road miles Duration Lay-overs
Structures	Ownership Management Capacity Status
Negotiability	Street furniture Landscaping Closures Contraflows Adjacent land
Traffic management	Police Escorting Time-window limitations
Authority etc views	Network manager Highway authority Police Utilities Public transport operators Other
Environment and ecology	Congestion Conservation/protection designations and limitations
Social and amenity	Congestion Traffic flow variations Disturbance
Permits required	Highway authorities Structure owners Other

Overall/route	
Theme	Also including:
Load	Description Number Geometry Net weight Handling constraints
Total journey	Source Destination Outside UK journey outline and logistic limitations <i>Note: The complete journey of an item from its initial source to its ultimate destination can affect or constrain the options available for an intermediate stage that may be the subject of an SO application. It can certainly affect the consideration of a substitute UK water-borne movement.</i>
Road rig	Proposals and options Gross weight Dimensions
Timing	Overall project Movement(s) Constraints <i>Note: Supply and/or construction contractual arrangements can have relevant impacts upon movement options.</i>
Route options	Historic Proposed road routes Potential water routes <i>Note: Previously used (road) routes are relevant background. May no longer be available. Initial consideration of water movement potential is necessary at the outset.</i>
Context of move	Overall project scope Overall project arrangements and requirements in respect of the move item(s) Series of moves Future moves in prospect <i>Note: Options and cost structure can be affected by these aspects. A series of movements may warrant an approach different from that for a single move.</i>
Regulatory constraints on project	Planning Environmental Other <i>Note: Quite often transport issues are constrained or defined by planning conditions for the project as a whole or some aspects of it, which can impact upon or prescribe options for the ALL movement.</i>
Risk issues	<i>Note: Use of novel routes and modes will impact upon project risk issues, both real and perceived, and upon their management.</i>

Appendix 4: Processing an application to move by road

1. We receive the application to move by road.
2. If we decide that there is potential for a move nearer to site by water we will ask the applicant to conduct a high level investigation. Where a specific water site is known by us we will provide this to the applicant although we may request the applicant to identify a suitable site. Depending on the information provided we may ask for completion of a water pro-forma.
3. If necessary we, the applicant and relevant organisations can meet to discuss which sites are to be investigated and scope the level of detail needed for the report. This is especially important for multiple locations or when clarification on a site is required.
4. If necessary, we may request clarification from the applicant on information contained in or missing from the water pro-forma or report. It might be necessary for us to speak to third parties eg the Environment Agency, local authorities etc to verify information.
5. Taking account of all the available information we decide whether the application to move by road should be permitted or whether a nearer water option should be undertaken.
6. We consult on the road route element of the journey.
7. We issue a Special Order permit (or in some cases a VR1 permit) to move load(s) by road.
8. Generally it takes around 8 weeks to process an application to move by road and this excludes the time required to investigate any water option. However, where there are complex issues surrounding a potential water option the total time taken can be significantly longer.

If you need help using this or any other Highways Agency information please call **0300 123 5000** and we will assist you.

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