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River Trust

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## A proposed strategy for waterborne freight

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19 February 2014



Freight Advisory Group (FrAG)

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The Freight Advisory Group was formed in December 2012 by the Executive of the CRT to provide strategic advice on inland waterway freight issues. The full terms of reference for the group, and biographies of the group members, are at Annex 1. Its first task was to develop a Freight Policy for consideration by the Executive and Trustees.

This report fulfils this first task, considering and recommending a proposed freight policy; it was considered by the CRT Trustees at their meeting on 21 November 2013, and their decisions are published alongside this report.

February 2014

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## EXECUTIVE SUMMARY

There has been a dramatic reduction in freight on CRT's Commercial Waterways over recent years from 3.8million tonnes in 2001/02 to just 1.3m tonnes in 2011/12, and currently less than 0.5m tonnes p.a.

Of the 10 commercial waterways most are in Yorkshire and the north Midlands, feeding the Humber estuary - Aire and Calder Navigation (A&CN) and its branches, the Sheffield and South Yorkshire Navigation (SSYN), the River Ouse and the Tidal Trent. Elsewhere there is the Gloucester and Sharpness Canal, and the River Severn Navigation upstream from Gloucester; the Weaver Navigation in Cheshire; and the Lee Navigation, from Hertford almost to the Thames at Bow.

The Freight Advisory Group (FrAG) was formed at the end of 2012 and tasked by CRT Executive to develop and recommend for the Trust's consideration a draft policy on waterborne freight and the commercial waterways. This was to take account of the costs of making and maintaining the 10 commercial waterways 'fit for freight' (CRT's current statutory duty), current and prospective market demand for freight and the revenue it would generate, and any wider public benefit; to consider how CRT might respond to this, what its options were and their implications, and then to make recommendations for policy and action.

Underlying this are some key questions for CRT, which this report helps to address

- Is CRT simply the infrastructure provider, leaving the market to determine the freight use (if any) of these waterways? Or does CRT have a strategic and promotional role in relation to freight?
- With so little traffic today, should the commercial waterways be managed and operated on a 'care and maintenance' basis, keeping the structures safe and sound, making them accessible and usable for the modest amount of leisure boat traffic, but seeking only to accommodate the small volume of commercial barges with minimal additional cost? Or is there an opportunity to 'break through' to a level of commercial traffic which would help to pay for maintaining the waterways and dredging their channels at suitable depths and dimensions for a reliable barge service?
- With the likelihood that the revenue from any new regular traffic would fall short of the incremental cost of making the waterway in question 'fit for freight', together with the marginal costs of operation, can or should CRT afford to meet any operating loss, and in effect subsidise the carriage of freight on the these waterways?

Carrying freight by inland waterways no longer comes onto the radar screen of shippers, logistics companies and freight forwarders, except in one or two very niche markets. So exploring potential market demand is not just about analysing current freight movement by road or rail on the relevant corridors, and looking at how and where water can offer some competitive advantage; it also has to be about how to organise, modernise and present waterborne freight as a serious transport mode to a modern highly commercial logistics industry.

FrAG has identified in the traffic coming into the Humber ports some potential for transshipment into barges for onward movement up certain CRT navigations leading off the Humber estuary; what is more significant, FrAG has identified in ABP, the major port owner and port authority for the Humber ports, some interest and enthusiasm in working with CRT to pursue such opportunities. Site visits with ABP and some customers have already been made to the Aire and Calder Navigation. And the Freight Transport Association (which is represented on FrAG) is already planning a "Freight by Water" marketing event in Yorkshire in the spring of 2014, which would help to promote any initiative which the CRT chooses to adopt as a result.

What is clear is that the circumstances of each of CRT's 10 commercial navigations are unique and very different from each other – different in their recent history of traffic (if any) and commodities, different in their connectivity to potential markets, different in the dimensions and draughts of vessels they can take, and different in the dredging and bank protections costs of making them fit for freight. There can be no

‘one size fits all’ approach to formulating policy for the 10 waterways, or even for all sections of the same waterway.

We are therefore proposing that the navigations – and distinct sections in some cases – be classified into three, to reflect their current or potential demand (or lack of) while also taking account of the costs of making and maintaining them ‘fit for freight’ (as an increment on the ‘fit for leisure’ costs).

**Priority Freight Route (PFR)** This is a waterway (or section thereof) where the discussions with ABP suggest serious potential traffic to explore. We are recommending a project be undertaken by CRT to take this forward. This would require a significant organisational and management initiative by CRT, together with some resources. It would require focus and a coordinated effort across relevant departments of CRT to examine what dredging, bank protection or other civil works (including locks and bridges) might be necessary along the PFR, what facilitation of wharf and canalside development CRT can offer, what commercial arrangements could be made, and what support or grants might be forthcoming from Local Enterprise Partnerships (LEPs) or local authorities or even from a EU programme. We are recommending a dedicated senior management appointment for an initial period of 12 months, with a director-led Steering Group to guide the project. The aim would be to work up a clear strategy and detailed business plan within the 12 months, and where a business case can be made, to present financial and investment requirements which would be considered by CRT and/or possible partners; if accepted then the project would be implemented over the subsequent period and resourced accordingly under the direction of the Steering Group.

**Category A** These are navigations (or sections thereof) where they may be some long term potential, and where the economics or external policy framework may be favourable, but which we recommend should be held in abeyance pending the outcome of the Priority Freight Route initiative on the designated Routes. They should continue on the current ‘care and maintenance’ basis as now until reviewed in (say) three years’ time – or earlier where a case can be established for PFR designation. In the meantime this does not preclude them from being used for the carriage of freight.

**Category B** These are navigations which are deemed by FrAG – using the data, knowledge and experience available to the group – to have little or no prospects for freight traffic, and/or where the costs of making them fit for freight would be high. For these the CRT has a policy choice: either to continue on a ‘care and maintenance’ basis and risk being challenged on the statutory obligation to maintain the navigation suitable for freight vessels; or to seek the statutory redimensioning of these navigations to leisure requirements, and/or the reclassification from commercial to cruising waterway.

The report contains a table proposing a complete set of 3-way classifications for the CRT’s commercial waterways for the Trust’s consideration – and in particular the designation as Priority Freight Routes of

- the Aire and Calder Main Line up to Leeds, together with a stub of the Wakefield Branch to Wakefield Europort (Whitwood)
- The Sheffield and South Yorkshire Navigation to Rotherham Lock
- The Ouse from Goole Railway Bridge to Barlby (Selby).

If the Trust is broadly content with this approach, the report suggests what the next steps might be, including stakeholder engagement and communication about the PFR concept and the wider policy framework and proposals, together with the Executive allocating suitable resources for the PFR project, making a suitable senior management appointment to take the project forward, and establishing appropriate governance arrangements by means of a Director-led Steering Group to oversee and guide the project according to agreed terms of reference.

## 1. INTRODUCTION

The Freight Advisory Group (FrAG) was set up in December 2012 to advise the Canal and River Trust Executive on freight on the CRT waterways (see Annex 1 for its terms of reference and membership).

Its first task – of developing a Freight Policy - has focussed on the 10 commercial waterways, which form a distinct part of the UK inland waterway network (see map opposite and a list in Table 1). A policy for waterborne freight inevitably involves a policy for these commercial navigations as well. The movement of commercial vessels on the cruising network of broad and narrow canals is not part of this review, on the basis that FrAG and CRT regard these vessels – whether carrying freight or providing services to the boating community – as welcome users, on the assumption that they operate within the current policies and arrangements for the operation and maintenance of the cruising network.

This report presents our assessment of the issues and sets out the questions that CRT faces about the future of these waterways and its attitude to freight; we seek to address these questions, analyse the market opportunities, the costs and practical implications, and make some proposals and recommendations.

In **Background**, we first set out the status of the 10 designated commercial waterways and CRT's remit and obligations in relation to them, and describes where EU, central and local government policies may be relevant to waterborne freight and need to be taken account of.

In the section **Our Assessment**, we have done what we can to analyse the market demand for waterborne freight (which is not straightforward), and the question of toll charges; in considering what it costs CRT to carry freight, we introduce the concept of making navigations 'fit for freight' compared with the costs of making them 'fit for leisure' traffic; we then consider the current and prospective financial performance of the waterways. An authoritative statement is then presented of the wider public benefit of waterborne freight (through the relief of congestion and reduced environmental impacts from less lorry traffic), and how it might bear on CRT's policy.

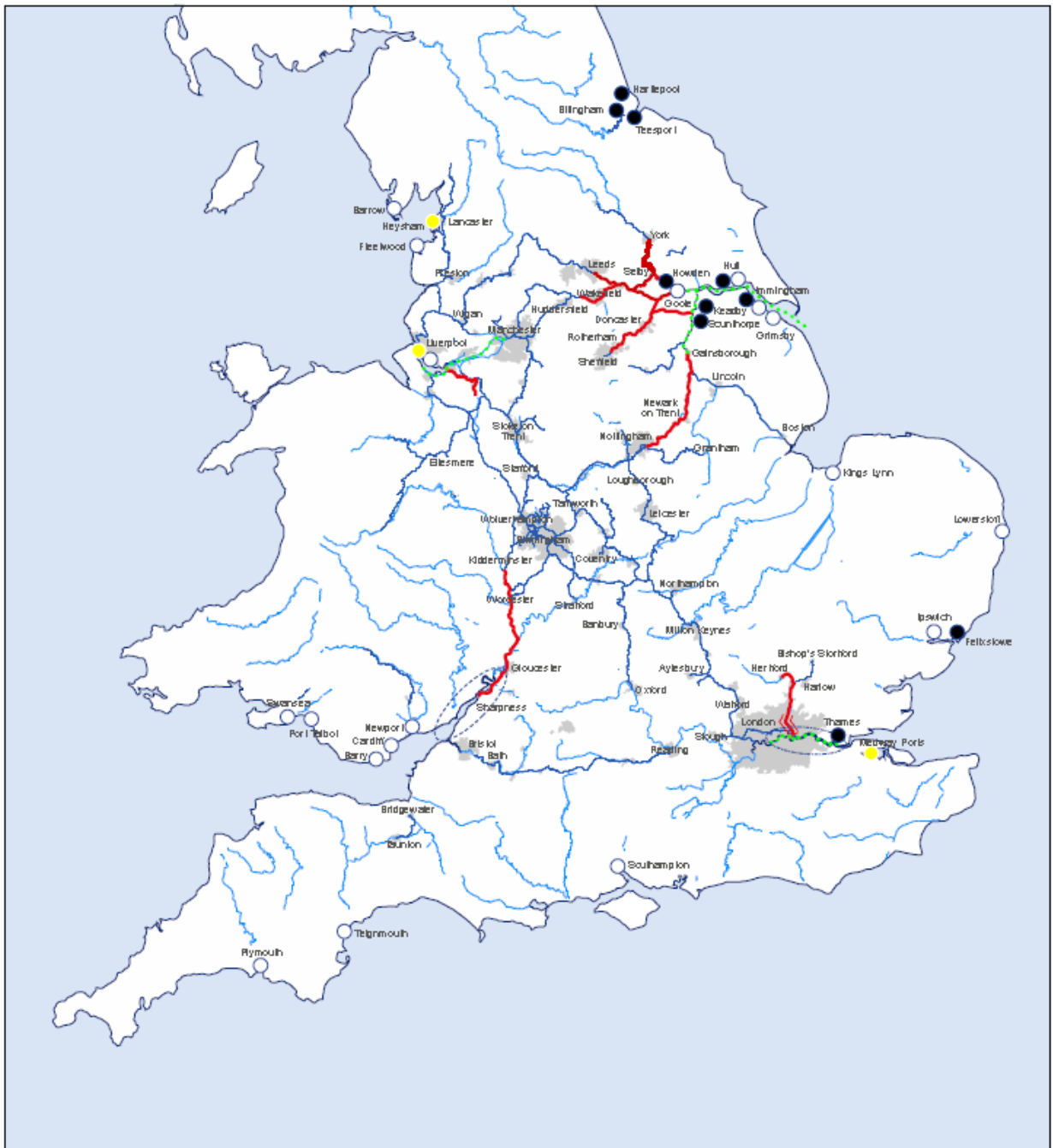
Given the poor financial performance and very limited prospects for some of the commercial navigations, we consider in the section **Where do we go from here?** The case for a 'priority freight routes' approach.

With this approach, attention would be focussed on the small number of sections of the commercial network where there is evidence of potential demand and where there is some justification for actively seeking to develop traffic by working with partners. These 'priority freight routes' would be the subject of detailed examination of market potential, of investment and operating costs to provide a good quality and reliable service, and funding and partnership options.

For the remaining commercial waterways, CRT faces choices, navigation by navigation, whether to continue with the current 'care and maintenance' regime, or to progress proposals to formally re-dimension the channel from a commercial to a leisure profile, or even to declassify from a commercial to a cruising waterway. FrAG is proposing two categories – Category A for those waterways that may have some freight potential and which should be held on 'care and maintenance' pending the outcome of the first Priority Freight Routes initiative; and Category B for those judged to have no viable potential for freight, and where the Trust needs to decide whether to continue with 'care and maintenance' or to seek statutory redimensioning or declassification.

The report concludes with **Recommendations and Next Steps**.

As a statement of FrAG's general position, we believe that the Trust, cognisant of the wide public obligations placed on it in the Transfer Order (2012) and of the commercial history of the nation's inland waterways, should be prepared to continue to support, strategically and for the long term, the promotion and carriage of freight where it is justifiable to do so, in light of the financial implications, competing Trust priorities, the generation of public benefit and considerations of affordability.



KEY:

- Trust waterways
- Trust commercial waterways
- main rivers
- - - other connecting commercial waterways
- ABP ports
- Peel Ports
- PD Ports
- Gloucester Harbour Trustees
- Port of London Authority

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## 2. BACKGROUND

The commercial waterways which are the subject of this report are the 9 distinct English navigations so designated in Schedule 12 Part 1 of the Transport Act 1968, together with the River Ouse added subsequently.

**Table 1**

Aire and Calder Navigation (including Wakefield Branch)
Calder and Hebble Navigation (to Greenwood Lock tail)
Sheffield and South Yorkshire Navigation (including Stainforth-Keadby)
New Junction Canal (connecting SSYN to Aire and Calder)
Trent Navigation (Nottingham to Gainsborough)
Weaver Navigation and Weston Canal
River Severn (Stourport to Gloucester)
Gloucester and Sharpness Canal
River Lee Navigation (Hertford to Limehouse and to tail of Bow Locks)
River Ouse (York to Goole Railway Bridge)

### 2.1 The Statutory Context

It is to these waterways that statutory obligations apply regarding the maintenance and operation of the navigation for freight, including maintenance of channel dimensions to permit passage of commercial barges; yet only five waterways currently carry any commercial traffic at all. Each waterway is unique, in terms of its facilities, traffic capacity and maximum vessel size, its costs of maintenance and operation, and the current or prospective levels of traffic.

CRT inherits a specific statutory duty to maintain the navigation of the commercial waterways to dimensions set out in the 1968 Act. However, crucially, the enforcement of this maintenance duty was modified in *The British Waterways Board (Transfer of Functions) Order 2012*, the practical effect of which is that CRT can now request that the Minister intervenes to prevent an enforcement in a specific case if the result would be CRT *“incurring substantial expense and that, having regard to its financial position, it would be unreasonable for it to bear that expense without a grant or further grant under section 43A of this Act.”* This puts CRT at the heart of protecting itself against an ‘unreasonable’ claim being forced upon it for the maintenance or restoration of the original statutory channel dimensions.

### 2.2 The Structure of Costs

At the core of the policy, and the basis of our recommendations, is our assessment of the costs, revenues and any wider benefits of the commercial waterways. An important and critical assumption for this assessment is the long term dredging costs of permanently maintaining the appropriate dimensions of each navigation. In carrying out our assessments, we have carefully sought to identify the ‘incremental’ costs that are genuinely attributable to maintaining the relevant navigations ‘fit for freight’, as opposed to maintaining them ‘fit for leisure cruising’. We decided to assess these on the pragmatic requirements of



today's commercial barges rather than on the 'statutory' requirements laid down in the 1968 Transport Act and detailed in the Fraenkel Report of 1972.

In addition to dredging costs, there are other incremental costs of maintaining Commercial Waterways - not least locks and bridges and their planned maintenance, and on some stretches a differing approach to bank protection. From these additional components, only bank protection has been considered in detail as this remains a further significant contributor to incremental cost, alongside dredging costs. Annexes 3 and 4 detail the method and results of estimating dredging and bank protection costs, both for 'pragmatic' channel dimensions for today's commercial barges and for leisure cruising.

In addition to the assessment of incremental cost, we have also sought to assess the day to day operating costs associated with the actual movement of commercial barges – bridge and lock operations, incidental repairs, etc. - which we have termed 'marginal cost'. A desktop assessment of previous reports commissioned or carried out by BW and which concern the costs and finances of freight is discussed in section 3.4 below. A recent in-house review of costs has, however, illustrated the difficulty of translating the current costs situation of very little traffic at all to one in which significant traffic would be flowing.

### **2.3 Public Benefit**

FrAG has also undertaken an estimation of the 'public benefit' associated with freight on CRT's waterways. Whilst a quantification of the public benefit associated with freight on CRT's waterways has been undertaken using the universally recognised "sensitive lorry mile assessment", FrAG believes that this benefit should be given some weighting in the consideration of policy or of CRT investment choices. However, FrAG recognises that the nature of the benefits – the marginal reduction of lorry movements, giving rise to less congestion and environmental impact, would appear to be peripheral to the Trust's principal charitable objectives. The weighting accorded to these benefits is clearly therefore a matter for the Trust to consider when reviewing competing claims for CRT's limited resources.

### 3 OUR ASSESSMENT

#### 3.1 Market Demand for Waterborne Freight

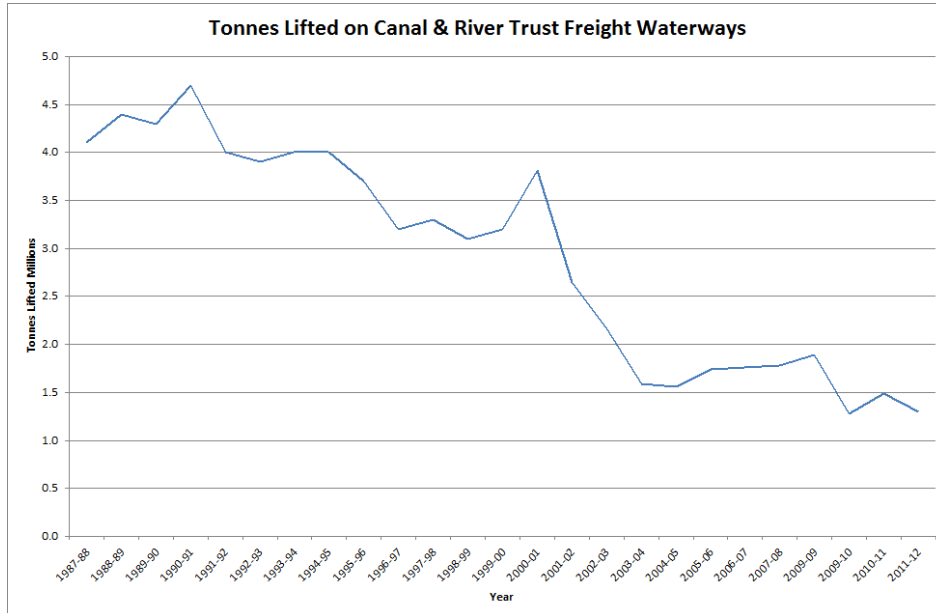
**Trends over the last thirty years** In the first year in which data was collected under current methodology in 1981, overall domestic waterborne freight stood at 129m tonnes, of which 9m tonnes was entirely internal (i.e. capable of being carried by non sea-going vessels). Total domestic waterborne freight peaked in 1988 at 156m tonnes but fell to 103m tonnes by 2011, largely because of increasing cooperation between oil companies to use whichever refinery can best serve a region, a decline in North Sea oil activity and the end of the UK coal industry.

The purely internal inland waterway traffic declined from 9m tonnes in 1981 to just 2.6m tonnes in 2004. Growth in demand for oil products had boosted tonnages to inland terminals in the '60's and '70s but changes in the way fuel duty was levied led to decline thereafter. Traffic recovered marginally and was at 3.7m tonnes in 2012.

A proportion of this traffic is on CRT Commercial Waterways, which declined from a peak of some 4.5m tonnes in 1988 to 1.3m tonnes in 2011 (see diagram below). Of the six distinct traffic flows in 2012-13, two traffics were lost in 2013. Excluding a port transfer at Goole/Caldaire (which is included in the statistics but is not a traffic flow as such), there are three traffics remaining at the end of 2013 –

- Ripple/Ryall (River Severn) - aggregates;
- Goole/Rotherham (from Hull via Aire & Calder, NJC and SSYN) - oil;
- Goole/Port of Howden (sea-going ship via River Ouse) – general merchandise

At current volumes, together these account for some 0.42m tonnes per annum, generating toll revenue of some £70,000 per annum.



**Underlying factors affecting demand** Many factors have contributed to this steady decline – some commercial, some institutional. For the CRT commercial waterways, a key event was the Transport Act of 1963 that separated the waterways (to BWB) from the ports they served (BTDB). Combined with a gradual switch to trading with Europe rather than deep-sea countries which encouraged direct trucking on ro-ro ferries (instead of conventional shipping) and a decline in (often waterside) heavy industry (particularly in Yorkshire), the established practice of transferring import cargo to barge for economic inland distribution

declined. Another significant factor in Humberside was the ending of 'overside saving' when barges no longer loaded direct to / from ship.

A relative lack of investment in infrastructure as compared with either roads (the motorways), or even rail (container train networks) further damaged waterways competitive position. The forced sale of BWB warehousing assets and the barge fleets in the 1980's effectively removed BWB from the day to day freight market place so that the waterways opportunity effectively 'disappeared' from most potential clients' radar. Barging was effectively left to a handful of operators most of which lacked the marketing reach or access to capital to reverse a trend that was largely caused by external forces.

The fact that some waterway traffic did survive in a highly cost competitive market does demonstrate that there is a potential role for the industry with the right geography, commodities and nature of the supply chain. The largest barges on the Aire & Calder can carry 600 tonnes which compare reasonably with the mean cargo carried by freight trains today in the UK (570 tonnes taking both directions). But the decline in volumes will have degraded the ability of the industry to finance new equipment or marketing, and it will have taken water transport off the radar screens of shippers, freight forwarders and logistics companies.

However, our analysis suggests that strong freight flows by road and rail continue to exist along some waterway alignments, and particularly along the Aire & Calder and South Yorkshire corridors, with a marked interest from the waste sector. These flows often pass through ports, implying that cargo is 'water connected' at one end of the journey. A number of studies have established that inland waterway traffic can be cost competitive in such circumstances. Rarely, however, are inland freight destinations now also water connected.

**Port-derived traffic – the NE waterways** Analysis of data from the GB Freight Model databases shows that a total of 7.2m tonnes (including energy goods) moves annually from Humberside to West Yorkshire and South Yorkshire together; with a further 4.1m tonnes moving to the North West, which could use Leeds as a transit site. Of this total of 11.3m tonnes, a high proportion (6.5m tonnes) is non-energy goods from the ports of Hull and Immingham. *Prima facie* this could be attractive to barge transport as at least one end of the journey is waterside. If for example a 10% inbound market share was secured (650,000 tonnes per annum) there would be sufficient to fill five large loads per weekday.

Whilst FrAG has concentrated its attention on actual port led traffics, other internal traffics such as minerals and waste remain of interest, and can be significant in certain situations both in terms of volume and length of contract. Such commodities are desirably linked with water transport in some local plans and strategies, for example mineral planning in Yorkshire, Worcestershire and Nottinghamshire. As a result it is important that CRT continues to engage with relevant local authorities, mineral planners, waste authorities and trade associations to assess the viability of this potential internal traffic (see **6.1 Stakeholder Engagement and Communication** below).

As a result of the market analysis it is clear that no other waterway (or route) has an identified potential market to the same degree as that associated with the Humber ports and the North East waterways.

FrAG has therefore sought to consider what steps are required to address the challenge. The following is recommended:

- Attention is focussed on imports and exports through the Humber Ports. Barges are able to offer much lower costs per tonne than road to inland sites in Leeds, Wakefield, Rotherham and others, before local distribution costs are added in. Almost all the potential traffic could be secured using a 'priority' network of the Aire & Calder from Goole to Leeds, part of the A&C Wakefield branch to Europort, the NJC and the Sheffield and South Yorkshire to Rotherham, and the Ouse to Howdendyke and Selby.
- The opportunity is marketed to the distribution industry in cooperation with the Humber Ports, owned and managed by Associated British Ports (who are also the Harbour Authority, and own the

Trent up to Gainsborough) and with the six smaller wharf operators<sup>1</sup>. ABP run a large and successful marketing department which they recognise does not currently take much account of the opportunity to use barges. ABP and other port operators could derive a competitive advantage if the Yorkshire area could also be served by barge as well as road and rail, because that increases choices for shippers and freight forwarders using the Humber as compared with other port regions.

- A large proportion of imported goods (e.g. steel and forest products) are stored inland or 'treated', for example bagged, processed or de-vanned before being distributed. If that storage and distribution role was conducted at a waterside site then barge transport for the 'trunk' leg would be highly cost competitive versus road as cargo would be water connected at both ends of the journey.
- There are a range of freight distribution companies and other intermediaries working in the Humber Ports which could take an interest in such waterside sites, which remain available.
- There appear to be measures that could be taken to standardise the physical capability of the suggested priority waterway routes, so that euro-standard barges could be used; consideration can be given to efficient container handling as well.

In these circumstances and providing an established freight marketing approach is used in the process, there is a case for focussing attention on the 'Priority Freight Routes' where a competitive advantage and potential market opportunity can be identified and progressed.

**Other sections of the NE Waterways** Although market potential has not been studied, FrAG considers that because of their small dimensions, there is no worthwhile potential for traffic on the Wakefield branch upstream from Europort (Whitwood), on the Calder and Hebble Navigation, and on the Selby Canal (linking the A&C at Knottingley to Selby). Nor is there apparent potential on the Stainforth and Keadby Canal or the Ouse between Selby and York.

**Other waterways** The Trent navigation, owned and managed by CRT from Nottingham to Gainsborough, and by ABP from Gainsborough to the Humber, has a significant history of traffic, with many small wharves. Until mid 2012 there was regular aggregates movement from Besthorpe. FrAG believes there may be latent potential and traffics on this stretch of waterway; however this would need to be examined further in the light of the experience with the proposed Priority Freight Route initiative and lessons learned about the right strategic approach to take.

FrAG has reviewed the other waterways, and in some cases the commercial potential. The port-derived potential for the Severn corridor (the Gloucester and Sharpness Canal, and the River Severn navigation) has been shown to be less than the potential derived for the NE waterways from the Humber ports, and this is one reason why the NE waterways have been proposed for priority rather than the Severn. It should be noted that there remains local minerals traffic on the Severn (one of the three current traffic flows). The Weaver Navigation with Weston Canal has seen no regular commercial barge traffic for 15 years. This period has seen the decline of chemical manufacturing around Northwich – historically the source of significant barge traffic. There was some use of barges from Salt Union's mine at Winsford to Ellesmere Port to facilitate coastal ship delivery of road salt to UK ports, however although no recent detailed market assessment has been made for this corridor, studies a few years ago identified a number of cost barriers to using the navigation again. Nevertheless, there has recently been some revived interest in this possibility and this will be pursued while the PFR initiative continues.

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<sup>1</sup> New Holland, Barrow Haven, Howdendyke, Flixborough and Gunness (RMS), Keadby and Grove and Neep House (Wharton), Burton-on-Stather

The Lee Navigation is dealt with in two parts. The upper section from Hertford to roughly the M25 is thought to have no prospects of use in view of the size of the waterway. The lower section from the M25 to the Thames at Bow Creek passes through a congested part of Greater London, and was the subject of new facilities (Three Mills Lock) and some upgrading in the vicinity of the London 2012 Olympic Park at Stratford. A study was recently commissioned by the London Borough of Enfield into options for waste transfer, in which the use of the Lee Navigation was considered against road and rail, but the economics were unfavourable, especially with the capital cost of handling equipment. However, FrAG recognises that the wider public benefit of freight being carried on barges on the Lee, in comparison with lorries through north east London's congested roads, are potentially considerable. While no specific traffic flows have been identified, the London Mayor has a policy interest in the greater use of water for freight movement in and around London. FrAG believes that investigations such as that by London Borough of Enfield should be informed by assessments of public benefit, and if there is a good public benefit case should be presented to TfL and the Mayor for consideration for support.

### **3.2 The Cost to CRT of Enabling Freight Movement**

In assessing how much it would cost CRT to maintain Commercial Waterways, FrAG carefully sought to identify the incremental costs that are genuinely attributable to maintaining the relevant navigations 'fit for freight', as opposed to maintaining them 'fit for leisure cruising'. FrAG identified two potentially most significant cost components- dredging and bank protection. It was decided to assess dredging costs on the pragmatic navigation channel requirements of today's commercial barges, rather than the 'statutory' requirements laid down in the 1968 Transport Act and detailed in the Fraenkel Report of 1972.

FrAG members with particular experience of the commercial waterways helped define both leisure and pragmatic freight dimensions, details of which can be found at Annex 2. Once defined, CRT Engineers took these dimensions and compared them to current hydrographic channel surveys and profiles. This was used to assess the dredging needs for each Commercial Waterway to meet the agreed profile - and therefore to support a sustainable and 'marketable' freight operation.

The key findings are that the difference in the total capital cost of dredging to achieve pragmatic commercial navigation profiles, compared with achieving standard leisure profiles, across all the Commercial Waterways would be between about £60m and £80m depending on the level of contamination in the dredged material (which influences disposal cost). While the order of magnitude of these costs is about right, the estimates (especially by navigation) need to be treated with caution, as they can vary according to the allowance made for two way working of loaded barges, the precise shaping of the channel on bends and in other places, and so on. Significantly, the estimates of equivalent capital cost for dredging only the Priority Freight Routes (see 5.2 below) to pragmatic commercial dimensions, compared with achieving standard leisure profiles, is between £32m and £41m depending on contamination levels.

A method has been agreed for translating these dredging costs into an annual equivalent cost<sup>2</sup>. Were all the commercial navigations to be dredged to the pragmatic freight dimensions, the annual cost to CRT (over and above the cost to maintain leisure dimensions) would be about £5.5m - £7m per annum for the first 10-15 years. If only those navigations which are proposed to be designated as Priority Freight Routes were dredged to pragmatic dimensions (and the rest maintained as now on a 'care and maintenance basis'), the annual cost to CRT would be about £3.3-4.2m p.a. for 10 years (see Annex 3). After year 10,

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<sup>2</sup> This assumes that the capital cost of achieving the required dimensions is spread out over the first 10 years for Priority Freight Routes, and 15 years for all other navigations and sections; and that an on-going maintenance cost would also be incurred, equivalent to 10% of the capital cost and spread out over 40 years for Priority Freight Routes and 25 years for all other navigations and sections. The latter would be incurred from year 1.

when the main dredging works are assumed complete, on-going maintenance is required but at a small fraction of the cost – only £100,000 per annum for the entire 100km length of the Priority Freight Routes.

The point has been made that every navigation is unique, in its physical and hydrographic characteristics, and the extent to which it is based on a river or on a man-made canal or a combination of the two. As set out in Annex 3, the annual cost of dredging to achieve and maintain the pragmatic dimension (over and above the leisure dimension) therefore varies from zero in the pure river navigations (Severn, Ouse and tidal Trent) to as little as £2,000 per km per annum for the upper part of the Lee, to over £20-25,000 per km per annum for the New Junction Canal, to the Aire & Calder between Castleford and Goole costing the most at £50-65,000 per km per annum - for the first ten or 15 years during which major dredging works are carried out. After that, only on-going maintenance cost continues, at a much reduced annual cost.

Dredging volumes do depend in part on the volumes of barge traffic likely to be involved, which influences the lengths of navigation over which it would be necessary to provide two way working, rather than single way working with passing places.

In relation to bank protection, FrAG asked CRT engineers to assess the incremental cost of replacing insecure banks to mitigate against the impact of freight barges (from both impact and barge wash). Data was taken from hydrographic survey cross sections and a bank condition survey was then referenced to the hydro data to examine whether steel sheet piles or stone 'rip rap' should be the preferred method of protection; stone rip rap being the least cost option but potentially the more intrusive within the channel.

The final analysis of this work suggests that the length of bank which must be considered for replacement on all the designated Commercial waterways and for specific lengths amounts to 14.1km and a broad estimate of the resultant cost over the next 10 to 20 years is £21million, plus or minus 25% (see Annex 4) – the difference between what is needed for freight compared with what is needed for leisure. The allocation of this cost as between sections which are part of the PFR and other sections is available but not reported in the Annex.

As illustrated, there is a significant variation in cost of dredging as between different navigation and different sections of the same navigation. Given this, attention should be focussed on sections of the commercial network

- where the incremental cost is relatively low (e.g. the river navigations);
- where there is evidence of potential demand and
- where there may be some *prima facie* justification for seeking actively to develop traffic by working with partners.

This has helped to identify those navigations and sections which we are proposing to designate Priority Freight Routes. For the remaining commercial waterways, CRT faces choices, navigation by navigation, whether to progress proposals to formally re-dimension the channel from a commercial to a leisure profile, to declassify as a commercial navigation or to retain the status quo (which we have described as a 'care and maintenance' regime in which no investment is made to achieve commercial profiles).

In January 2013, FrAG undertook a review of the current condition of the Commercial Waterways and updated information provided in section K of the 2002 report of the Freight Study Group 'Freight on Water a New Perspective'. Following the review it was shown that there had been no significant decline in the condition of the commercial waterways over the past 10 years.

### 3.3 Planning and Policy

The planning and policy environment within which CRT has to operate has radically changed over the last three years and is continuing to be reformed, which presents significant challenges for promoting and

encouraging the growth of waterborne freight. The abolition of the regional governance structure<sup>3</sup> in England (outside of London) and the structural reform of the planning system<sup>4</sup> in England have had a significant impact upon strategic planning and transport delivery. Part of the remit of the nine former Regional Development Agencies was to support the implementation of the Regional Transport Strategy (which in many cases contained strategic policies promoting waterborne transport) in order to help sustain and stimulate economic growth within the English regions. For example, some of the RDAs funded waterborne freight demand studies and waterway infrastructure projects to support waterborne freight activity.

New policies and structures have been put in place since, which have new implications for the possible role of waterborne freight in local transport, planning and economic development policies.

### **3.3.1 National Planning Policy in England**

As part of the Coalition Government's policy objective to streamline the planning system, the Government in March 2012 cancelled all previous policy guidance contained within the suite of Planning Policy Guidance Notes (PPGs) and Planning Policy Statements (PPSs) in England and replaced it with a single document, the National Planning Policy Framework (NPPF) which sets out the Government's planning policies for England. There is now only one explicit reference to waterborne transport within the new national planning guidance document. The NPPF states that the transport system needs to be balanced in favour of sustainable transport modes and local plans should *"safeguard existing, planned and potential rail heads, rail links to quarries, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals, including recycled, secondary and marine-dredged materials"*.

In addition to the NPPF, the Coalition Government has published a suite of National Policy Statements (NPSs) which sets out Government policy on different types of national infrastructure development such as energy, transport, water, waste water and waste. Under mitigation of transport impacts, these NPSs state that *"water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective"*.<sup>5</sup>

### **3.3.2 Sub-Regional & Local Planning Policy & Transport Planning in England (excluding London)**

At the sub-regional and local levels, the Local Enterprise Partnerships (LEPs) have responsibility for strategic transport as one of their areas of interest. Meanwhile, County Councils and Unitary Authorities are Local Transport Authorities and have a duty to produce a statutory Local Transport Plan (LTP). It is still unclear as to whether the LEPs will be successful in filling the void created by the abolition of the RDAs and whether Central Government's capital funding allocations will be made available to the LEPs for waterborne transport purposes.

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<sup>3</sup> All the Regional Assemblies, Regional Planning Bodies, Regional Development Agencies in England outside of London were abolished by the Coalition Government

<sup>4</sup> Structural reform of the planning system in England has resulted in: the removal of the regional planning tier in England outside of London; revoking of Regional Spatial Strategies being revoked in England outside of London; introduction of a national planning policy framework and new National Policy Statements for national infrastructure development; Planning Inspectorate taking responsibility for determining development consent orders for Nationally Significant Infrastructure Projects

<sup>5</sup> Under mitigation of transport impacts, these NPSs states that *"Water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective"* and *"Government policy encourages multi-modal transport and the IPC [now the Planning Inspectorate] should expect materials to be transported by water or rail routes where possible. Applicants should locate [new biomass or waste combustion generating stations] in the vicinity of existing transport routes wherever possible. Although there may in some instances be environmental advantages to rail or water transport, whether such methods are viable is likely to be determined by the economics of the scheme. Road transport may be required to connect the site to the rail network, waterway or port. Therefore, any application should incorporate suitable access leading off from the main highway network. If the existing access is inadequate and the applicant has proposed new infrastructure, the IPC will need to be satisfied that the impacts of the new infrastructure are acceptable as set out in Section 5.13 of EN-1."*

The statutory LTPs set out authorities' transport strategies and outline their programme of measures to be delivered over the short, medium and long term. The LTPs cover all types of transport including public transport, walking, cycling, cars and freight and are generally reviewed on a 5 year cycle. The Department of Transport published in July 2009 guidance on LTPs which defines the national policy framework for the development of the current round of LTPs. It covered both the five national transport goals which should be priorities for local authority consideration, and the broader framework of local government policy within which Local Transport Plans need to add value. This guidance included 24 possible measures for meeting the five national transport goals. One of the possible measures cited related specifically to waterborne freight, "Support the use of rail and water for the movement of people and freight".

### 3.3.3 Planning Policy & Transport Planning in London

In London, there is strong policy and public sector investment support for promoting and delivering sustainable transport led by the Greater London Authority. The Mayor's London Plan (Spatial Development Strategy for Greater London) and the Mayor's Transport Strategy provide the strategic planning and transport policy framework for the London Boroughs in preparing their statutory Local Plans, Sub-Regional Transport Plans and Local Implementation Plans. Transport for London (an arm of the Greater London Authority) actively promotes and funds sustainable transport initiatives including waterborne transport, from which CRT's waterways have benefitted and continue to do so.

### 3.3.4 European Policy

In September last year, the European Commission announced new measures (NAIADES II) to get more freight onto Europe's rivers and canals. The new proposals intend to realise the unused potential of Europe's 37,000 km of inland waterways. They will enable freight to move more easily and lead to further greening of the sector, as well as encouraging innovation and improving job opportunities.

The Commission is proposing actions in the following areas:

**Removing bottlenecks** Significant bottlenecks in the form of inadequately dimensioned locks, bridges or fairways and missing links are hampering the sector's full development potential. The Commission is proposing to improve transport of waterborne freight by upgrading locks, bridges and navigation channels.

**Greening and innovation** Compared to other land-based modes of transport, inland waterway transport is energy-efficient, safe, almost congestion-free and silent. The Commission will propose measures including new standards for engines to encourage investment in low emission technologies as well as support for research and innovation.

**Better connections to other forms of transport** Priority will be given to improving links between inland waterways, road and rail – with particular attention paid to connections at sea and river ports. Based on its on-going review of River Information Services, the Commission will make proposals to improve cargo handling facilities and reduce paperwork.

**Investing in a skilled workforce** The waterways sector relies on a skilled workforce. The new proposals are expected to bring broader recognition of qualifications and careers, to improve labour access, and mobility.

Implementation of NAIADDES II requires financing for policy support actions (coordination, governance and preparatory actions), research and innovation, infrastructure and the greening of the fleet.

At EU level, financing will be provided by the Connecting Europe Facility (CEF) for infrastructure investments, by HORIZON 2020 for research, development and innovation, by the CEF and HORIZON 2020 programmes for NAIADDES II policy support actions and for deployment of innovation, including for the greening of the fleet. It is proposed that Member States should include inland waterways in their integrated territorial investment strategies and projects, and plan for support from the European Regional Development Fund, the European Social Fund and the Cohesion Funds.



Taken together, these new policies and frameworks require significant engagement by CRT at least in the Priority Freight Route areas, to establish to what extent planning policies and funding streams can be deployed or applied to support some of the outcomes which the PFR initiative will be seeking to bring about – whether in land use designation, in investment in canal infrastructure, in planning policies which will require greater use of waterborne freight, or other measures.

### 3.4 Financial performance of the commercial waterways

The business and financial performance of the commercial waterways – treating them as a self-contained business of the CRT – is not routinely reported either in the management accounts or the financial accounts of the Trust. From time to time special investigations are carried out to identify the relevant revenues and costs and relate them to the volumes of traffic carried. The most recent of these is an internal BW report prepared for Defra in 2010 covering the 2008-09 and 2009-10 periods. A further source is a report prepared by Oxera for BW in April 2007 *Costing Inland Waterway Freight* examined the finances and economics of the Yorkshire Waterways (then called the Yorkshire Business Unit), using data for the 2005-06 period both these are available on the FrAG Extranet.

#### 3.4.1 Internal BW Report

In 2009-10, revenue costs directly attributable to the freight operation were estimated at £670k, against toll income of £131k reflecting some 1.3m tonnes lifted and 12,105,761 tonne-kms carried, some 80% of which was carried on the Yorkshire waterways (See Annex 5); a net financial loss of over £0.5m pa.

In addition, heavy maintenance expenditures would be associated with maintaining availability of the commercial waterways for freight operation over the coming years; this investigation estimated a sum of nearly £10m directly attributable to freight over a ten year period for the Yorkshire waterways. Other significant costs, mostly associated with dredging, are estimated for the rivers Severn and Weaver were they to be made available for freight traffics using commercial barges.

#### 3.4.2 Oxera Report

Based on their estimates using 2005-06 data, Yorkshire Business Unit<sup>6</sup> fully allocated costs attributable specifically to freight at £980k. Within this, short term incremental costs (actual costs that would be escaped were no freight to operate) were estimated at £270k, though this does not seem to allow for longer term heavy maintenance escaped. Toll income was £240k, reflecting 18.2m tonne-kms carried.

Securing additional traffic would increase toll revenue and *prima facie* could reduce the financial losses. A later section explores whether and under what conditions such additional traffic might be gained at reasonable cost.

The extent to which additional traffic would reduce losses depends on the marginal costs of accommodating this traffic. The marginal costs of additional traffic on the Yorkshire Waterways were estimated by Oxera at 0.4p per tonne-km, to be compared with a nominal toll rate of 1.0p and an actual toll rate of 1.1p.

Marginal costs of accommodating new traffic on the other commercial waterways could be low or high depending on the dredging required and whether other heavy maintenance is required over a period of time (see explanation above). Currently no formal analysis of marginal costs on the other waterways has been made.

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<sup>6</sup> Yorkshire business unit's waterways include the Aire and Calder Navigation, Calder & Hebble Navigation, Sheffield & South Yorkshire Navigation and the River Ouse.

Tolls for general traffic are set at a nominal rate of 1p per tonne-km throughout the network; actual realised tolls across the network vary slightly from that and average 1.1p per tonne-km. This toll rate has been unchanged for a considerable time.

Any reasonable analysis of freight revenues and properly attributable costs on the three waterways with current traffic will, because the volumes are so small show a net cost to the Trust of facilitating that freight operation - even with the current 'care and maintenance' regime for freight.

**3.4.3 Recent in-house cost and revenue assessment** Due to the very modest level of freight now passing on CRT waterways, a reactive approach to the management and maintenance of the commercial waterways has been adopted over recent years. Considering the current very low level of actual freight movement (less than 0.5m tonnes p.a. as at end 2013), the present 'marginal' cost is particularly low when compared with that of developing a waterway for known or prospective freight tonnages – volumes which could incur significant incremental costs to enable freight movement to move (see above) and significant marginal costs associated with the actual operation of facilities and their supervision and management.

Marginal cost analysis of prospective freight traffics would need to include an assessment of;

1. **Planning & Development Costs**– Cost incurred in initial meetings with freight customers and or developers. These are one off costs at the start of new freight traffic. They can also include one off dredging arrears to achieve a channel fit for the freight operation where required.
2. **Freight Provision & Maintenance Costs** –Cost of actually facilitating the new freight traffic. Provision and maintenance costs are associated with the actual management and running of freight. Any spot dredging required on an on-going maintenance basis would also be included under freight provision and maintenance.
3. **Income** – Estimates of the annual income likely to be generated from the freight traffic.

#### 4 PUBLIC BENEFIT

An authoritative method of estimating public benefit for waterborne freight is well established. It has been developed by the Department for Transport as part of the evaluation of the case for the award of Mode Shift Revenue Support, a revenue subsidy scheme for encouraging the use of sustainable freight modes (rail and water) as an alternative to road haulage. While a case could possibly be made for trying to estimate other aspects of public benefit from waterborne freight, the Freight Advisory Group is satisfied that the DfT methodology is appropriate to use in this context.

The method estimates the environmental benefits of removing a lorry-mile from the roads due to carriage of those goods by rail or water. The benefits vary considerably with the nature of the roads from which the lorries are deemed to be removed, from 7p per lorry-mile on uncongested motorway standard roads to 86p on high traffic motorways, 74p on A roads and £1.43 per lorry-mile on other roads, particularly urban roads.

An exercise has been carried out by FrAG using this method to quantify the public benefit of the current freight flows, grossed up to an annual equivalent (see Annex 6).

The Mode Shift Benefit (MSB) value that CRT waterways contributed as a result of carrying freight that would otherwise travel by lorry is estimated to be about £260k in 2012-13. This is based on 0.44 m tonnes lifted in 2012-13 (this excludes the port transfer at Goole/Caldaire which generates no Mode Shift Benefit). The *current* annual rate of tonnes lifted is slightly less - estimated at 0.42m tonnes lifted - but because the tonne-kms are significantly lower this traffic generates a Mode Shift Benefit of only some £100k, and toll revenue of £70k. Where a traffic flow is on both CRT and others' navigations, the public benefit is apportioned based on the respective distances.

Whilst the public benefit associated with CRT's freight flows is welcomed, the nature of the benefit does not readily fall within the charitable objectives and the public outcomes which CRT is there to deliver. The weight accorded to these benefits is a matter for the Trustees, but FrAG recognises that they may not count for their full value when freight needs are considered against other resource claims on the Trust. However, it is fair to say that the presence of commercial barges also add to the vibrancy and appeal of the waterways, although it is difficult to value this. In general, the benefit is more likely to be valued by the operator who moves the commodities by barge, as it is this calculation which can be used to secure some revenue support from the Department for Transport for the operation.

## 5 WHERE DO WE GO FROM HERE

### 5.1 The Overall Picture

Over the last decade, traffic has virtually disappeared from the commercial network, with nine distinct carryings now down to three – the CEMEX aggregates traffic on the River Severn navigation, oil traffic from Hull docks via Goole to Rotherham, and ships moving 4kms past Goole Railway Bridge to unload at Howdendyke: together these amount to some 0.5m tonnes lifted per annum. Only by adopting a ‘care and maintenance’ regime on the commercial network is it possible to contain the costs (while maintaining a safe and secure waterway for the leisure users), but the result does not provide, for the most part, properly dredged channels which would meet the requirements for regular commercial barge traffic, with the exception of the three river navigations (Tidal Trent, Severn and Ouse).

As set out at some length in 3.1, *Market Demand for Waterborne Freight*, most of the waterways have seen no regular traffic for 5-10 years and many have no realistic prospects at all for freight in the future. As explained, FrAG has had a number of exploratory discussions with APB, together with site visits, about the opportunities for traffic transhipped into barges from ships coming into the Humber ports. There have also been discussions about the possibilities of marine dredged aggregate from the Humber estuary. All this suggests the potential for a new initiative for the Aire and Calder main line, together with the SSYN as far as Rotherham.

Nevertheless, there are some fundamental issues, even barriers, for bringing freight traffic back onto the inland waterways. The knowledge and understanding among shippers about waterborne freight is very low, although the FTA’s Freight by Water unit is working to change this; there are not the intermediaries (freight forwarders, logistics companies) with the experience who can readily conceive and plan how to fit a waterborne link into a supply chain; the barge operators are largely a small scale industry (although collectively they punch above their weight through the CBOA), and cannot easily command the resources or investment in equipment to radically transform the vessels or service they offer; freight by water suffers a cost disadvantage compare with trucks where additional transhipment is required at origin or destination or both; by the same token, water offers an advantage where value-adding activities are located at the canalside.

However, in the case of certain traffics originating from ships coming to the Humber ports and destined for locations in west or south Yorkshire – manufacturing plants, stockyards or logistics centres – we believe these barriers may be surmountable, especially if the interests of commercial partners can be harnessed. There is some knowledge of the relevant commercial navigations among the shippers, the ship operators and the port; the port (ABP) is prepared to act as a form of intermediary between shippers, ship operators, freight forwarders, the CRT and potential inland operators. And the volumes of traffic which might be the subject of serious investigation offer a scale which might just see commercial or investment partners coming in to facilitate investment in vessels, dredging, canalside wharf development and so on.

### 5.2 A Priority Freight Route Approach

Section 3.1 proposes the idea of Priority Freight Routes – canals and sections of canal in the Yorkshire waterways area linked to the Humber - where serious marketing and investigative effort by CRT working with ABP is called for to test the proposition that there is freight to be won to the commercial waterways with the right approach. Turning these ideas into action requires a significant organisational and management initiative by CRT, together with some resources: to commit to this, the Executive and the Trustees will need to satisfy themselves that the direction of travel is right and that the resources can be made available within the overall agenda of the Canal and River Trust.

At its heart is the need for focus and a coordinated approach across the Trust. We recommend that sections of waterways which are thought to have this potential should be designated as **Priority Freight**

**Routes** (Annex7). We recommend that the section of the Aire and Calder Navigation from Goole to Knostrop Wharf and to the Wakefield Europort (on the Wakefield branch), the Ouse up to Selby and the NJC and SSYN to Rotherham should be so designated. A member of CRT senior management should be given the overall responsibility for developing and progressing proposals for the Priority Freight Routes, leading the collaboration with ABP, exploring with potential commercial partners the practical opportunities for wharf and other canalside development or leasing, identifying requirements for dredging and other works on the Routes, working with the partners and CBOA to find and bring alongside potential operators, and preparing financial costs and evaluations so as to present viable propositions to the CRT Executive. In this, the Priority Freight Routes Manager will need to draw on the engineering, financial, commercial, property and planning functions within CRT, perhaps through a 'virtual' project team.

As a strategic move to make the Priority Freight Route attractive to more of the market, FrAG believes it is worth examining in particular the works necessary to accept the Euro Class II standard "Euro-barge" on part at least of the Route (see Annex 8); initial examination suggests the main adjustment would be to lock widths and certain fixed structures to take 6.60m beam vessels.

We believe that a concentrated effort of this kind, coordinated across the Trust, is necessary to determine - once and for all – whether there is real potential, under the most favourable conditions, to bring significant and sustainable freight back onto the commercial waterways.

We also believe that there is only one area of the network (covering three waterways) which should be designated Priority Freight Route at this time. While there may be other waterways that on further examination justify this treatment, it is important to concentrate the effort and resources to give this first route the maximum chance of success.

### 5.3 The Remaining Waterways

We believe it is helpful to create two classifications for the remaining waterways.

**Category A** is for those waterways where there may be some long term freight potential; they should be held in abeyance pending the exploration of the Priority Freight Route approach. The idea is that relevant lessons learned from the PFR approach could be applied to consideration of the future of these Category A waterways. With proper local market investigations, this would help CRT to decide whether proposals for traffic development could or should be taken forward, or if not whether there should be redesignation to Category B. Our proposal for this designation is shown in the table below.

All Category A navigations would continue on a 'care and maintenance' basis, until reviewed in (say) three years' time, or earlier if the results of the Priority Freight Route initiative were encouraging. Meanwhile, any serious enquiries for traffic emerging for these navigations should be considered on their merits, including consideration of spot dredging where this would be necessary to facilitate new traffic.

**Category B** is for those waterways with no traffic and little or no prospects of traffic or where maintaining the recognised leisure dimensions might readily facilitate the passage of some commercial barge traffic (See table below). Currently CRT has the statutory obligation to maintain navigation channels for freight throughout the commercial network, with dimensions as set out in the Fraenkel report and referred to in the Background section of this report. An operator or shipper can challenge CRT to comply with these obligations and require that the navigation is dredged to these dimensions, but the Transfer Order (2012) already referred to provides that CRT may apply for a dispensation to the responsible Minister, who if satisfied that the cost would be too onerous and unreasonable can determine that the statutory obligation does not have to be complied with.

The choice for the Trust is this: it may continue with these waterways on a 'care and maintenance' basis, making sure they are fit for leisure traffic, and risking the occurrence of compliance requests to meet the commercial dimensions (and the consequent applications for dispensation to the Minister). Or the Trust

may decide to seek formally to change the statutory obligations: either by seeking a statutory redimensioning of the navigation to the channel dimensions appropriate to leisure use, or to seek reclassification of the commercial navigation to the cruising network. There may not be much practical difference between the two, but one may appear more ‘final’ than the other.

#### 5.4 A Sustainable Policy for Freight

In summary, we propose the following

- Adoption of the concept of the Priority Freight Route, which envisages a concerted effort (led by a designated member of the senior management team) to explore with the relevant commercial partners - and where applicable the local shipping port - all aspects of possible freight traffic and (where appropriate) canalside development, leading to a report to CRT and, where favourable, proposals for financial commitment by CRT
- The designation of the Aire and Calder main line from Goole Docks to Leeds (River Lock Tail) , the Wakefield branch of the A&C to Wakefield Europort (Whitwood), the Ouse from Goole Railway Bridge to Barlby (Selby), and the SSYN (including the New Junction Canal) from the A&C to Rotherham Lock tail as the first Priority Freight Routes
- Category A navigations are those which may have some long term potential for freight but are held pending the conclusion of the first Priority Freight Route initiative, and continue on a ‘care and maintenance’ basis as now until reviewed after five years (or earlier if a case is established for Priority Freight Route designation)
- Category B navigations are those which are deemed to have little or no prospects for freight traffic, and for which the CRT has a policy choice – to continue on a care and maintenance basis and risk being challenged on the statutory obligations to maintain navigation channels suitable for freight; or to progress the statutory redimensioning of the navigations to leisure, and/or the reclassification from commercial to cruising.

This table summarises the classification we are proposing for all the different navigations and branches on the commercial waterway network.

Navigation	Section or branch	Proposed category	Rationale
1. Aire & Calder Navigation (Main Line)	Goole Docks to Leeds (River Lock tail)	Priority Freight Route	Connectivity and traffic potential with Humber Ports
2. Aire & Calder Navigation (Wakefield Branch)	Castleford Junction to Wakefield Europort (Whitwood)	Priority Freight Route	Connectivity and traffic potential with Humber Ports
3. Aire & Calder Navigation (Wakefield Branch)	Wakefield Europort (Whitwood) to Tail of Fall Ings Lock	Category B	No apparent prospect of use / no current wharfage
4. Aire & Calder Navigation (Selby Canal)	Knottingley to Selby	Category B	Limited waterway dimensions. No apparent prospect of use / no current wharfage

5. Calder & Hebble Navigation	Fall Ings Lock to tail of Greenwood Lock	Category B	Limited waterway dimensions. No apparent prospect of use / no current wharfage
6. The Sheffield & South Yorkshire Navigation,	New Junction Canal junction with the Aire & Calder via SSYN to Rotherham Lock	Priority Freight Route	Connectivity and traffic potential with Humber Ports
7. The Stainforth and Keadby Canal		Category B	No apparent prospect of use
8. Ouse Navigation	Goole Railway Bridge to Barlby (Selby)	Priority Freight Route	Connectivity and traffic potential with Humber Ports
9. Ouse Navigation	Barlby to York	Category B	No apparent prospect of use
10. Trent Navigation	Gainsborough to Cromwell	Category A	Possible / Latent traffic potential – awaiting outcome of Priority Freight Route initiative
11. Trent Navigation	Cromwell to Meadow Lane (Nottingham)	Category A	Possible / Latent traffic potential – Limited waterway dimensions and wharfage
12. Weaver Navigation and Weston Canal		Category A	Although no traffic for many years, recent works and potential demand suggest further review of potential
13 River Severn Navigation	Gloucester to Worcester	Category A	Current traffic and some long term potential
14 River Severn Navigation	Worcester to Stourport	Category B	No apparent prospect of use
15. Gloucester and Sharpness Ship Canal		Category A	Little prospect of use at this stage. But this Category because of link to Severn navigation
16. River Lee Navigation	Bow Creek to M25	Category A	Possible / latent traffic potential (market and / or policy driven)
17. River Lee Navigation	M25 to Hertford	Category B	Limited navigational dimensions and no apparent traffic

## 6 THE NEXT STEPS

### 6.1 Stakeholder Engagement and Communication

The policy proposal to designate Priority Freight Routes suggests a level of communication commensurate with the importance that CRT puts on agreeing a strategy for freight which has the buy-in of key stakeholders. FrAG recommends that CRT works with the relevant LEP's, local authorities and of course with CRT's major stakeholders.

In particular, we recommend that CRT stay in active touch with county planners, mineral companies, waste authorities and others – for example, in West Yorkshire, the Trent and Severn valleys, to keep the use of waterways on the radar screen of those responsible for public policy on these commodities.

In addition we recommend that CRT holds an engagement event in the North East which would encourage stakeholders such as shippers, investors, port interests, local authorities, DfT, operators, logistics companies and European partners to consider CRT's Priority Freight Route proposal. Initial discussions between FrAG and the Freight Transport Association have identified willingness for the Association to support such an event, with the potential of sponsorship or strategic collaboration coming from one or more of the other key stakeholders.

The Trust may also wish to engage with its stakeholders on the wider implications of this proposed policy.

### 6.2 Financial and Resource Implications

As proposed in 5.2 above the PFR approach requires a designated member of the Senior Management Team to lead this project on a task and finish basis say for a period of up to 3 years, depending on the initial findings –

This position needs to be resourced in order to;

- steer the development of a sustainable freight strategy
- explore with ABP and relevant ABP customers regarding opportunities for traffic development and funding (e.g. Europe) along the Priority Freight Route
- Review current CRT policies and processes e.g. wharves, tolls, lock and bridge operational charges etc.
- lead appropriate research and studies
- plan engagement and consultation events

The initiative will also require administration, secretarial, technical and project support from a virtual team nominated from the Trust's appropriate functions. The objective of this is to achieve results on the ground and to develop a strategy that moves us towards sustainable freight activity.

It should be noted that FrAG does not recommend any increase or decrease to incremental or marginal cost expenditure on the Commercial Waterways or any variation from the current resource needed for the care and maintenance approach to the Commercial Waterways, pending the outcome of the Priority Freight Route initiative. Rather it suggests that immediate resources are necessary to support the primary recommendations set out in this report. It is proposed that the CRT Executive considers what the appropriate budget and duration for this work should be.



### **6.3 On-going Role of the Freight Advisory Group**

We advise that a steering group, chaired by a senior executive of CRT might be established to oversee this project and the implementation of the policy generally. External members of FrAG would be pleased to be invited to contribute to this work.

## **7 ACKNOWLEDGMENTS**

As Chairman of FrAG I would like to express my considerable appreciation of the great skill, knowledge, experience and ideas which the members of the Freight Advisory Group have brought over a 12 month period to our work and policy recommendations. I also wish to express the warm thanks and appreciation of myself and all the Advisory Group members to the technical, planning and enterprise staff of Canal & River Trust for the significant time and effort they have contributed to enable our Group to understand the current approach to maintaining the Commercial Waterways and the resources which may be required in the future. I would particularly like to mention the support and contributions of Richard Rutter, Heather Clarke and Stuart McKenzie; and special thanks go to Samantha Ramparsad for her organisational and administrative contribution as Secretary to FrAG.

The development of a draft Policy on Waterborne Freight and the Commercial Waterways has been the principal task of the Freight Advisory Group, which we have approached as a Task and Finish exercise. In the event further advice is required we would be willing to assemble again in the future.

## **8 REFERENCES**

**ANNEX 1.** Terms of reference and membership of FrAG

**ANNEX 2.** Cost of dredging using leisure and pragmatic freight dimensions

**ANNEX 3.** Summary of estimated annual incremental costs of dredging

**ANNEX 4.** Bank protection estimated costs

**ANNEX 5.** Yorkshire waterways (Map)

**ANNEX 6.** Mode shift benefit assessment

**ANNEX 7.** Proposed commercial waterways classification (Map)

**ANNEX 8.** Euro barge dimensions and assessment