Britain’s inland waterways, originally constructed to serve the Industrial Revolution, are enjoying a revival. More recently they have been widely recognised as a resource for leisure activities and regeneration of the built environment; they still provide a vital link between coastal and inland ports and major sites of manufacturing, industry and commerce.

While the public enjoy walking, fishing, cycling and boating along the UK’s inland waterways, freight vessels continue to carry cargo safely and unobtrusively on some of them. The UK’s inland waterways network provides an environmentally sound and sustainable means of moving goods and materials from one place to another, reducing traffic congestion and positively contributing to local communities.

High Economy, Low Emissions
One very positive aspect of transporting freight by water is the potential for cutting fuel costs: one single 600 tonne barge can move the equivalent of twenty-four 25 tonne lorry loads. Waterborne transport normally travels at speeds slower than vehicles on the road; however, its ability to carry substantially more in one load delivers considerable economies of scale on larger commercial navigations, and on many other sections of the canal system. As well as using fuel very efficiently, freight on inland waterways produces low emissions with low noise, and is usually unobtrusive – a powerful combination of the environmentally friendly and the socially acceptable.

Purpose-Built for Freight
The inland waterways were originally developed as arterial routes for the transport of raw materials and goods from producer to consumer. They still fulfil this role today, working in harmony with pleasure craft while carrying vital loads through town and country alike.

British Waterways
British Waterways is the public corporation responsible for managing over 2,000 miles of waterways across the UK. It works in partnership with a wide range of public, private and voluntary organisations to realise the potential of the UK’s waterways and the land adjacent to them. Projects range from the restoration of disused waterways and the building of new ones, the regeneration of brownfield sites, the facilitation of waterborne transport, and the promotion of the canal network as a system fit for the 21st Century.

Private-sector operators use the waterway network to carry various types of freight. The movement of freight by water on our waterways is covered by our ‘Conditions for the Carriage of Freight 2003’ (copy available on request). Tolls are levied according to tonnage carried and distance travelled.
Our waterway network is made up of more than 2,000 miles of river based commercial navigations and canals. It provides an arterial system that reaches deep into the heart of many towns and cities.

Most freight is moved on our commercial navigations. These are integrated with other modes of transport, and offer excellent potential for stimulating the development of the out-of-town distribution centres that are increasingly important to today’s supply chain.

Access

Different cargoes require different types of craft, and freight operators make use of a variety of vessels, including barges specifically designed for dry bulk or liquid goods. Freight vessels may be self-propelled river barges, tug pulling or pushing dumb barges. Lighter Aboard Ship barges (LAS), or specialised Ro-Ro (Roll-on-Roll-off) barges, according to the cargo and size of the waterway.

Sea-going vessels, such as dry bulk carriers and liquid tankers, access the inland waterways from estuaries that link with UK short sea shipping routes to Europe and its continental river and canal system.

Sea-going vessels can be accommodated at the following terminals:

<table>
<thead>
<tr>
<th>Navigation</th>
<th>Port / Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aire &amp; Calder</td>
<td>Caldene</td>
</tr>
<tr>
<td>River Ouse</td>
<td>Howden</td>
</tr>
<tr>
<td>River Ouse</td>
<td>Selby</td>
</tr>
<tr>
<td>Caledonian</td>
<td>Corpach</td>
</tr>
<tr>
<td>Chinn</td>
<td>Ardrossag</td>
</tr>
<tr>
<td>Gloucester &amp; Sharpness</td>
<td>Sharpness</td>
</tr>
<tr>
<td>Weaver</td>
<td>Weston Point</td>
</tr>
</tbody>
</table>

For more information about maximum vessel dimensions, please contact the waterway concerned, or members of our Freight Team (contact numbers are at the back of this brochure).
**BULK GOODS**

Many of the different products and materials moving along our inland waterways are carried in bulk. Dry cargoes range from minerals and grain to waste and recyclable materials. Liquids, including petroleum products, are moved from refineries or coastal terminals to inland distribution terminals. Similarly, aggregates are regularly taken from quarries to distribution centres or concrete batching plants.

**Abnormal Loads**
A growth area in transporting specialised freight by water is the movement of abnormal indivisible loads – both by sea-going vessels and barges. In some instances, water transport may be the only possible way to move these loads.

One example of this essential service was the transport to Drax of pre-fabricated sections of the Flue Gas Desulphurisation Plant as deck cargo on a sea-going vessel on the River Ouse. Another example was the movement of electricity-generation equipment in units of up to 350 tonnes to Cottam by Ro-Ro barge (vessels that can operate very effectively on some of our larger commercial navigations) via the River Trent.

Moving these huge loads by water is a practical solution, and has the added advantage of avoiding disruption to road traffic and local communities.

**Publicity and Community Projects**

Inland waterways can also be a foundation for community projects. In some deprived areas freight traffic is being used to create jobs and opportunities for canal side industrial regeneration on brownfield sites where the local industry historically served by the canals has long gone.

Freight transport by water also offers excellent opportunities for positive publicity and PR. Restored, traditionally painted narrow boats are available for publicity and education throughout the canal system.
WASTE AND RECYCLABLE LOADS

The vast potential of water transport is clear from the many areas where it brings significant economic benefits and positive social and environmental impact. In some major cities it is a valuable way to help reduce road congestion and avoid possible charges.

For example, two typical calculations for customers have shown that the movement of aggregates in West London will save 43,000 lorry journeys, and a proposed Waste by Water initiative could remove one third of a million dustcart miles from the streets of North London every year.

**Opening Up Restricted Sites**

Water transport can provide a solution for sites affected by planning restrictions on the use of road transport. Moving freight by water to these sites can overcome such restrictions, and benefit the environment too. Where there are restrictions on moving freight by road to and from a particular site, it could effectively be land-locked, and so remain undeveloped. If such sites are alongside navigable waterways capable of carrying freight, the waterways could be the key that unlocks development potential.

**Floating Warehousing**

Through the imaginative use of barges as ‘floating warehouses’ business could save on both transit costs and storage costs whilst the goods are in transit or awaiting discharge close to, or at their destination.

**Containers**

Another sector in which water transport can be the practical alternative is the carriage of unitised loads, such as containers. Containers are ideally suited to movement in vessels on our commercial navigations - although the physical restrictions of some navigations through locks and under bridges may limit the number of containers that can be carried on an individual vessel.

**Sustainable Distribution**

Inter-modal and multi-modal forms of transport are seen as key elements in Sustainable Distribution, which is encouraged by Government. As part of a combined transport solution waterways can complement other transport modes, in many cases adding the benefit of low environmental impact. Freight Distribution Centres sited beside suitable waterways would make this easy.

**Coastal Transport**

The water around the coast of Britain is a natural coastal freeway that enables vessels to move goods from port to port. At ports linked to inland waterways, some vessels can voyage inland or goods can be transferred to smaller vessels for shipment further inland by water. This has the added benefit of further reducing dependency on long haul road transport, a key target for both UK and European Community environmental and logistics policy.

**WASTE AND RECYCLABLE LOADS**

Municipal waste is ideal for transport by water because it is a high-bulk commodity with low value and low time sensitivity. Containers of waste and segregated recyclable material such as paper, glass, metal and building materials can be carried from a material recovery facility for further recycling or disposal. There are strong arguments for Local Authorities to lead the way in using water transport to move municipal waste and recyclables.

Through our current studies of the potential for moving various products in containers on our waterways, we expect that this will prove to be both economic and environmentally friendly and include efficient methods of transhipping goods and materials seamlessly from one transport mode to another.

**Coastal Transport**

For waterside development sites, the delivery of construction materials and removal of waste and recyclable construction materials by water can be the logical, economical and environmentally sound solution.
PLANNING FREIGHT STRATEGIES

The environmental benefits of water transport - especially the potential for reducing congestion and emissions - have been recognised strategically in Local Transport Plans. Freight Quality Partnerships and Freight Groups have been formed to help Local Authorities formulate and develop freight strategies, and we are involved with many of them in promoting water transport and explaining its advantages.

Endorsements for freight on water are common, especially from users. The value of water transport has been recognised in such documents as: Royal Commission on Environmental Pollution Eighth report: Transport and the Environment (1994); Government White Papers: A New Deal for Transport (1998), Waterways for Tomorrow (June 2000) and Planning Policy Guidance Note 13 (March 2001). Freight on water is also considered by Government to be an option for the transport of waste as identified in Planning Policy Guidance Note 10 (2001). Encouragement and recommendations to assist freight movement by water were included in the report by the Freight Study Group on freight: A new perspective (2002). A new document “Planning for Freight on Inland Waterways” is currently being produced which will help to act as a guide through the sometimes complex planning guidance already available.

Grants for Freight by water

The transfer of freight from road to water is environmentally sound, and is encouraged by Government through the Freight Facility Grant scheme. The grant (subject to certain criteria) is available from the Department for Transport, and can be a key factor in the business decision to move freight by water and to provide waterside freight facilities.

A number of successful projects to transfer freight from road to water have been assisted by Freight Facility Grants. These include the refurbishment of a fuel distribution terminal at Leeds; the development of aggregate distribution sites; the refurbishment of a wharf for the transfer of vegetable oils; a new steel-handling wharf facility; and the building and refurbishing of vessels.

Other successful operations by water included the movement of recycled building materials around London Docklands, and the movement of timber in Scotland by ship via Ardrishaig.
COMMERCIAL FREIGHT

We see major opportunities to carry freight on our waterways.
To capture this business we are working to revitalise our existing loose-bulk markets, and to develop the movement of municipal waste. We are also seeking more freight traffic to use our waterways to penetrate inland from coastal and estuarial ports, thus extending the natural ‘motorways of the sea’ connecting with our European neighbours.

British Waterways is continuing to develop the Inland Port concept for the movement of containers, and to encourage the development of speciality markets such as Abnormal Indivisible Loads where appropriate.

OUR VIEW OF THE FUTURE
HOW CAN WE HELP YOUR FREIGHT LOGISTICS?

British Waterways’ teams in marketing, water resource, and waterways operations are ready to help you take advantage of the tremendous capacity of our waterways, and to ‘carry more weight with waterways freight’. We can also provide extra support from civil and mechanical engineering and estate management specialists to answer questions or help with development projects.

Please contact us to talk about how your organisation could benefit financially, and benefit the environment too. We would be delighted to share our ideas and help you develop yours.

Contacts
Tony Plews
Head of Freight Development
01923 201257
tony.plews@britishwaterways.co.uk

Roy Parker
Freight Marketing Manager
0113 281 6850
roy.parker@britishwaterways.co.uk

Tom Chaplin
Freight Development Executive
01923 201257
tom.chaplin@britishwaterways.co.uk